DOCUMENT RESUME

ED 411 199 SP 037 426

TITLE	Applying Research about Instructional Strategies That Work with At-Risk Students. Training Program Designed for Extended School Services, Kentucky Department of Education.
INSTITUTION	Kentucky Association of School Administrators, Frankfort.
SPONS AGENCY	Kentucky State Dept. of Education, Frankfort.
PUB DATE	1993-03-00
NOTE	95p.; The references, appended readings, and many activity pages contain broken type and may not reproduce well.
PUB TYPE	Guides - Classroom - Teacher (052)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Economically Disadvantaged; *Educational Strategies; Elementary Secondary Education; Faculty Development; *High Risk Students; Inservice Teacher Education; Instructional Materials; *Special Needs Students; *Teaching Methods
IDENTIFIERS	*Kentucky Education Reform Act 1990

ABSTRACT

Designed to promote the goals of the Kentucky Education Reform Act, the purposes of this training module are: (1) to identify common fallacies about instruction for at-risk students; (2) to identify factors associated with successful instruction for this population; and (3) to apply this learning to the extended school program at participants' schools. The module is divided into three major sections: "Awareness"; "Factors Associated with Successful Instruction for At-Risk Students"; and "Programmatic Suggestions." The training materials actively involve teachers in making connections to their own school's extended services for at-risk students. The anticipated length for the entire module is approximately five and one half contact hours; suggested agendas and formats for two after-school sessions or one full day session are included. Each section contains background information on the topic, an overview of the module, and suggested activities. Four readings are appended. (Contains 23 references.) (ND)

APPLYING RESEARCH ABOUT INSTRUCTIONAL STRATEGIES THAT WORK WITH AT-RISK STUDENTS

Training Program Designed for

Extended School Services
Kentucky Department of Education

By

Kentucky Academy for School Executives
the Professional Development Division of the
KENTUCKY ASSOCIATION OF SCHOOL ADMINISTRATORS

MARCH 1993

CONTENTS

Introduction. 2

Suggested Formats and Agendas. 3

Awareness Activities 4

Background Information
Overview
Introductions and Recollections
Who is the At-Risk Student?
Exploring the Fallacies
The Impact of the Fallacies

Successful Instruction for At-Risk Students. 28

Background Information
Overview
Counteracting the Fallacies
Successful Instructional Techniques
Importance of Parent Involvement

Programmatic Suggestions 55

Background Information
Overview
General Program Characteristics
Closure
Evaluation

References. 67

Readings. 69

INTRODUCTION

"Applying Research about Instructional Strategies that Work with At-Risk Students" was produced by the Kentucky Academy for School Executive for Extended School Services of the Kentucky Department of Education. The purposes of this training module are (1) to identify common fallacies about instruction for this population, (2) to identify factors associated with successful instruction for at-risk students, and (3) to apply this learning to the extended school program at participants' schools. To accomplish these goals the training module is divided into three major sections: (1) Awareness, (2) Factors Associated with Successful Instruction for At-Risk Students, and (3) Programmatic Suggestions. The module is designed to apply to all teachers regardless of instructional levels.

The background information contained in the module and the activities are based on current research about teaching and learning. The training materials actively involve teachers in making connections to their own school's extended school services for at-risk students. The anticipated length for the entire module is approximately 5 1/2 contact hours.

"Applying Research about Instructional Strategies that Work with At-Risk Students" promotes the accomplishment of Kentucky Education Reform Act (KERA) goals, is outcome based, and reflects principles of adult learning and the change process. Active participation and commitment are encouraged.

SUGGESTED FORMATS AND AGENDAS

TWO DAYS (AFTER SCHOOL)

Day One (Approximately 2 hours and 30 minutes)

Introductions and Recollections
Who is the At-Risk Student?
Break
Exploring the Fallacies
The Impact of the Fallacies
Counteracting the Fallacies

Day Two (Approximately 2 hours and 45 minutes)

Review
Successful Instructional Techniques *
Break
Importance of Parent Involvement *
General Program Characteristics
Closure
Evaluation

ONE DAY OF FOUR AND ONE HALF HOURS

9:00 - 9:30	Introductions and Recollections
9:30 - 9:45	Who is the At-Risk Student?
9:45 - 10:15	Exploring the Fallacies
10:15 - 10:30	Break
10:30 - 11:00	The Impact of the Fallacies
11:00 - 11:30	Counteracting the Fallacies
11:30 - 1:00	Lunch
1:00 - 2:00	Successful Instructional Techniques *
2:00 - 2:15	Break
2:15 - 3:00	Importance of Parent Involvement *
3:00 - 3:30	General Program Characteristics
3:30 - 3:45	Closure
3:45 - 4:00	Evaluation

***NOTE:** It is strongly recommended that homogenous grouping by elementary, middle, and high school be utilized with "Successful Instructional Techniques" and "Importance of Parent Involvement". Each group then completes the assignments based on their particular circumstances.

I. AWARENESS ACTIVITIES

I. AWARENESS ACTIVITIES: BACKGROUND INFORMATION

Introduction

To meet the educational needs of the estimated 13 million at-risk students in this country is truly vital to our society. According to a coalition of eleven educational organizations, unsuccessful students eventually drain the economy in welfare and social services costs and hamper the nation's ability to compete internationally (Schorr, 1989). Each year approximately one million youngsters leave high school without graduating and are virtually unemployable. While in school, these students demonstrate low achievement, poor self-esteem, indifferent attitudes and a lack of identification with school (Gage, 1990).

To successfully implement programs which combat the serious problems associated with the at-risk student, those involved must be aware of some of the common fallacies associated with the at-risk learner. The purpose of the background information and the activities in this section of the training module is to increase that awareness. Key questions are as follows: (1) What is the definition of at-risk? (2) Who really is the at-risk student? (3) What are the possible characteristics of students considered at-risk? (4) What are common fallacies about instruction for the at-risk student? (5) How can teachers change their perceptions of the at-risk student and counteract the fallacies associated with labeling the at-risk student?

Awareness

The Definition of At-Risk

There are many definitions of the broad and very much in vogue term "at-risk". Although research in the late 1970s showed negative effects of labeling children, it is impossible to create programs, target children for those opportunities, and not use some kind of definition. Therefore, it must be clarified that children considered "at-risk" are those who may experience negative educational outcomes (Thornburg, Hoffman, Remeika (1991). It is important to note that the definition is based on outcome; not a particular status of the child. Also fallacies exist relative to a definition of at risk. It should not automatically imply a particular socioeconomic, ethnic, or cultural background. Programs should not be aimed solely at students with medical, language, or behavioral problems. Further, certain cautions must be used in any definition of at-risk (Hrncir and Eisenhart, 1991). The following should be remembered.

1. Risk is not static.
2. Standardized test scores alone are not effective predictors of risk.
3. Children are not isolated entities, but develop within an ecological context.

Who is the at-risk student?

With the above concerns and cautions in mind, it is important to explore the factors leading to negative educational outcomes - to understand who may be at risk. Those factors can be grouped into (1) poverty, (2) lack of family support, and (3) negative peer pressure (Thornburg, Hoffman, & Remeika, 1991).

Poverty. A solely economic definition of poverty does not adequately describe the environmental conditions, life experiences, quality of resources, and the lack of opportunities of those who are poor (Thornburg, Hoffman, & Remeika, 1991). Neither does it relate how people in poverty adjust their aspirations and efforts downward when faced with limited opportunities. All of these factors affect the educational outcomes of students who are poor. Additionally, conditions of poverty are correlated with increases in the use of drugs, alcohol, and violence and with teen pregnancy. Finally, the rate and severity of poverty are especially evident among racial and ethnic minority groups. It should be stressed, however, that the underlying factor is poverty and not ethnic or cultural background.

Family support. Our society has changed drastically over the last three decades, yet adequate support systems for those changes have not always occurred (Schorr, 1989). For example, the number of single-mother households has more than doubled since 1959 and the poverty rate in these homes is six times higher than in two-parent families (Thornburg, Hoffman, & Remeika, 1991). Employment of mothers outside the home and the lack of adequate child care is another major factor in family support.

Negative peer pressure. The role of poverty and changes in family support are not the whole picture. Children in overindulgent homes - the "cornucopia kids" - often present problems to educators (Baldwin, 1989). Such students have difficulties following through on projects, demand constant stimulation, tend to have superficial relationships, and do not value personal property. These "cornucopia kids" and other students facing peer pressures to be free of adult intervention are outside of poverty, yet are at risk for negative educational outcomes.

Characteristics of At-Risk Students

Although the students who are at-risk and utilizing the Extended School Services (ESS) vary over programs, research has shown well-documented characteristics of students who drop out of school or do poorly in school (Gage, 1990).

Low achievers. Generally, those at-risk students are low achievers in school or have problems with attention.

Indifferent attitudes. Because of low achievement, many ESS students have developed an indifferent attitude toward their school work which compounds their problem.

Low self-esteem. Because of the low achievement, most students at risk have poor self-esteem, particularly when it comes to academics.

Lack of identification with school. All of these characteristics often result in the student having a lack of identification with school. They do not like school; they do not want to be there; they do not like the people in the school.

Common Fallacies about Instruction for the At- Risk Student

Knapp, Turnbull and Shields (1990) discuss conventional educational "wisdoms" about children of poverty. These, along with others, highlight the common fallacies of the broader at-risk population.

Fallacy # 1. Students are deficient in their preparation for school and their families have given them a bad start in life (Knapp, Turnbull and Shields, 1990). These assumptions often foster stereotypical ideas about the capabilities of a child and detract from an accurate assessment of the child's real problems and potential. Strengths of a cultural background may be lost. The consequences of such fallacies often lead to low expectations, failure to examine what the school does to exacerbate problems, and possible misdiagnosis of learning problems .

Fallacy # 2. Sequencing and challenge in the curriculum should be broken up into fixed sequences of discrete skills which are organized from the simplest (the basics) to the more complex (higher-order skills). Instruction should typically emphasize mastery of these skills (Knapp, Turnbull and Shields, 1990). Such assumptions underestimate a student's capabilities, postpone challenge, fail to provide context, and reinforce failure.

Fallacy # 3. The role of the teacher is to provide only direct instruction (Knapp, Turnbull and Shields, 1990). This implies such aspects as teacher-controlled situations, careful structuring of tasks, and whole-group formats. A critique of such approaches suggests that students do not learn to think for themselves and become dependent on the teacher to monitor progress, to motivate, and to structure all aspects of learning.

Fallacy # 4. A uniform structure provides students clear behavioral expectations (Knapp, Turnbull and Shields, 1990). While structure is needed, the overall theme of the classroom may become one of behavior management. This tone may inhibit the freedom needed to explore, to contribute, and to move beyond basic skill development.

Fallacy # 5. Low-achieving students should be placed in homogeneous groups for success (Knapp, Turnbull and Shields, 1990). The problem with this fallacy is that at-risk students often become permanently segregated into tracks and they miss the exposure to the culture of the higher achieving students. Tracking affects learning, future orientations, peer relationships, and impressions of school environment (Vanfossen, Jones, & Spade, 1987).

Fallacy # 6. Low-achieving students need easy work. The problem with this fallacy is that students with easy learning tasks attribute success to the easiness and their self-esteem is not enhanced. Clifford (1990) suggests that a moderate probability of success, not easy tasks, is essential to intrinsic motivation. Learning for the at-risk learner should, therefore, stretch capabilities. Moderate academic risk taking should be encouraged without external constraints such as surveillance, deadlines, threats, bribes and rewards.

Fallacy # 7. At-Risk students must always be given special consideration about their efforts. The problem with this fallacy is that students see themselves as helpless and assume no responsibility for their failure or success (Alderman, 1990). Only performance goals rather than learning goals are stressed.

OVERVIEW

OBJECTIVES:

(1) To get to know one another
(2) To acquaint and reacquaint ourselves with being a student
(3) To collect information about feelings associated with school success and failures
(4) To define "at-risk" for this training session
(5) To become familiar with some cautions related to any definition
(6) To become familiar with common fallacies about instruction with the at-risk population
(7) To relate these fallacies to individual students
(8) To study the impact of the common fallacies on the at-risk population as a whole
(9) To highlight the research associated with the fallacies

TOTAL TIME: 2 contact hours

ACTIVITIES:

A. Introductions and Recollections
B. Who is the At-Risk Student?
C. Exploring the Fallacies
D. The Impact of the Fallacies

EQUIPMENT: Overhead projector and screen

MATERIALS:

Background information
2 chart stands with paper
Newsprint
Markers
Masking tape
Transparencies as indicated
Handouts as indicated
Worksheets as indicated

ACTIVITY A: INTRODUCTIONS AND RECOLLECTIONS

OBJECTIVES: (1) To get to know one another
(2) To acquaint and reacquaint ourselves with being a student
(3) To collect information about feelings associated with school success and failure

TIME: 30 minutes

EQUIPMENT: None

MATERIALS: 2 chart stands (one chart titled "Feelings about Doing Well" and one titled "Feelings about Not Doing Well")
Newsprint or flip chart
Markers
Masking tape

PROCESS:

1. Welcome all participants and quickly relate basic information such as location of bathrooms, agenda, packets, etc.
2. Tell participants that we want to get acquainted with each other and to get in touch with being a student who may be having difficulties in school. Set tone of room by asking participants to forget the current circumstances in their lives and to think back to their days as a student. Ask them to picture in their mind their school - their elementary, middle school, or high school. Ask them to remember the smells, the sounds, and the colors of the surroundings. Allow for about a minute of quiet reflection.
3. Then ask all participants to recall some aspect of learning and school work that they really liked and that they were good at doing. Encourage them to think about how they felt about themselves as a result of doing something well. Then ask all participants to recall some aspect of learning and school work that they did not do well. Encourage them to think about how they felt about themselves as a result of not doing something well.
4. After giving about 2 minutes to think quietly, ask participants to find a partner (preferably someone they do not know). Partners are to introduce themselves by name, and to share recollections of feelings about school experiences.

   Partners should also be prepared to introduce one another to the group and to share one or more of the feelings recounted by each partner. (For groups of over 20 persons, the leader may ask that partners share only feelings that are not already listed on the charts.)

5. Ask two participants to assist you in recording responses on the prepared charts.
6. Each pair introduces their partner to the large group and relates their partner's recollections while the two assistants record the comments. After all partners have had a chance to comment, post charts on the wall for reference during the session.

ACTIVITY B: WHO IS THE AT-RISK STUDENT?

OBJECTIVES: (1) To define "at-risk" for this session
(2) To become familiar with some cautions related to any definition

TIME: 15 minutes

EQUIPMENT: Overhead projector and screen

MATERIALS: Transparency I,B: 1 & 2
Handout I,B: 1

PROCESS:

1. Facilitator presents content found in background information relative to a definition of at-risk and who is at risk. Suggest there must be cautions with any definition and use transparency I,B: 1 as a visual aid.
2. Discuss importance of negative educational outcomes to the overall future of the student.
3. Relate characteristics of the at-risk learner found in background information using transparency I,B:2 as a visual aid.
4. Ask participants to later complete Handout I,B:1 with any staff associated with Extended School Services in their school. Explain that those working with at-risk students should have a common definition of at-risk as well as an understanding of the factors and characteristics of those identified students.

CAUTIONS FOR DEFINITIONS OF AT-RISK

1. **Risk is not static.**

2. **Standardized test scores alone are not effective predictors of risk.**

3. **Children are not isolated entities, but develop within an ecological context.**

Activity I.B: Transparency 2

POSSIBLE FACTORS LEADING TO NEGATIVE EDUCATIONAL OUTCOMES

Poverty

Lack of Family Support

Negative Peer Pressure

Activity I.B: Handout 1

WHO IS AT RISK IN YOUR SCHOOL?

Briefly discuss the characteristics of your school in relation to location, size, etc.

State the definition of At-Risk for your school.

State some particular cautions in using this definition at your school.

Briefly state some specific indicators of at-risk factors at your school under the major categories below:

Poverty:

Lack of Family Support:

Negative Peer Pressure:

ACTIVITY C: EXPLORING THE FALLACIES

OBJECTIVES: (1) To become familiar with common fallacies about instruction with the at-risk population
(2)To relate these fallacies to individual students

TIME: 30 minutes

EQUIPMENT: None

MATERIALS: Newsprint and marker
Transparency I,C: 1
Small Group Directions 1,C: 1-7

PROCESS:

1. Explain that we have explored some feelings associated with not doing something well in school; we have looked more closely at the definition of at-risk. Now the attention is turned to common fallacies about instruction for the at-risk student.
2. Ask participants to state ways in which they feel the at-risk student learns best. List those mentioned. Explain that the research has shown some to be common fallacies.
3. Display Transparency I,C:1 which lists common fallacies. Ask questions to extend discussion such as, "How have you seen this occur in your school?"
4. Explain we will examine each fallacy as it might relate to individual students considered at risk. We will utilize the perspectives of several students who represent common stereotypical views of at-risk students. Divide the large group into 7 small groups and assign each group one Small Group Directions (1 - 7). Each set of directions is a description/script of a student. Remember each description/script depicts one of the seven fallacies.
5. Ask each group to appoint a facilitator/recorder and get a volunteer who will play the part of this student in a panel discussion before the large group. The small group facilitator leads a discussion of the hypothetical student. Together the group completes the paragraph/dialogue that the "student" will read to the whole group while participating on the panel. The group should help the "student" acquire gestures and body language that fit that student. Finally each group should decide on one question they will ask the student after he/she reads his part or dialogue. The question should relate to how the school's view of him or her has affected him or her. The facilitator/recorder should plan to ask the question during the panel presentation.

6. After approximately 10 minutes of preparation, gather as a large group with panel members at front of the room. Tell participants that the panel members cannot hear what you are saying. Read the descriptions of each student to the "audience". Begin to call on each panel member. He or she should read the prepared dialogue. Facilitator should ask for the questions from the audience.
7. After all questions are answered, add closure to the activity by summarizing fallacies and some common stereotyping we do with individual at-risk students.

COMMON FALLACIES ABOUT INSTRUCTION FOR THE AT-RISK LEARNER

Fallacy 1

Students are deficient in their preparation for school and their families have given them a bad start in life.

Fallacy 2

Sequencing and challenge in the curriculum should be broken up into fixed sequences of discrete skills which are organized from the simplest (the basics) to the more complex (higher-order skills). Instruction should typically emphasize mastery of these skills.

Fallacy 3

The role of the teacher is to provide only direct instruction.

Fallacy 4

A uniform structure provides students clear behavioral expectations.

Fallacy 5

Low-achieving students should be placed in homogeneous groups for success.

Fallacy 6

Low-achieving students need easy work.

Fallacy 7

At-Risk students must always be given special consideration about their efforts.

Small Group Directions: Timid Tim - Fallacy #1

Directions: Appoint a facilitator/recorder. Get a volunteer to act the part of your student on the panel presentation. The facilitator reads the description of your student. Together decide on some gestures and speech patterns to help your volunteer act the part of your student. Complete the dialogue for your student with two or more sentences. Decide on a question to ask your student during the panel presentation that relates to how the student feels the school views him. Decide on the student's answer.

Description of Student

"Timid Tim" is an 8- year-old male who is in the last year of the primary program. He is very, very quiet and does not cause any problems for his teachers. His performance assessments, however, have been low. He has few friends and the bus driver reports he goes home to an empty house. He lives with his mother who works at a factory.

Dialogue for Timid Tim

Uh...uh...uh...uh...my name is Tim. Uh...I'm in the primary program at my school. Uh...it's ok... I guess I like it ok. My teacher says my reading and math are not too good. She wants my Mom to help me, but... well... she works a lot. Gee, this is really hard to say...but...I'm not sure my Mom...I don't think she can read so good. My grandmother says I would do better in school if I had glasses...I don't know...I think I can see ok.....

Question for Your Student

Small Group Directions: Hurrying Harry - Fallacy #2

Directions: Appoint a facilitator/recorder. Get a volunteer to act the part of your student on the panel presentation. The facilitator reads the description of your student. Together decide on some gestures and speech patterns to help your volunteer act the part of your student. Complete the dialogue for your student with two or more sentences. Decide on a question to ask your student during the panel presentation that relates to how the school views him as a student. Decide on the student's answer.

Description of Student

"Hurrying Harry" is a 15 year old, quite good looking, very personable student who always moves quickly at whatever he does. He is an athlete and is the star of the local high school in both basketball and football. He is a very poor student and his eligibility for sports is always in question. He knows all "the ropes" about school and charms most everyone.

Dialogue for Hurrying Harry

Hi! Good to see you all here today and I'm very happy to be with you as well. I always like talking with teachers. You guys - oops and dolls - oops ladies - do a good job. I really admire you...really. Sometimes I do have to say you give a lot of boring stuff for kids to do. I mean...I really like moving on things quickly - everything quickly and sometimes - most of the time - that's just not possible in school. Maybe you could work on that a little bit. You know - speed things up a little. Another thing. . . . .

Question for Your Student

Small Group Directions: Creative Christina - Fallacy # 3

Directions: Appoint a facilitator/recorder. Get a volunteer to act the part of your student on the panel presentation. The facilitator reads the description of your student. Together decide on some gestures and speech patterns to help your volunteer act the part of your student. Complete the dialogue for your student with two or more sentences. Decide on a question to ask your student during the panel presentation that relates to how the school views her. Decide on the student's answer.

Description of Student

"Creative Christina" is a very creative and sensitive 6th grade girl. She is very talented in all areas of the arts. She sings beautifully and plays the piano although she has never had formal lessons. Her drawings and other art work are outstanding and she won an award in the 3rd grade. She is a terrible student in most all other areas and is approximately 2 grade levels behind her peers. She must be told every step to take on all assignments because she can't seem to remember what to do. She will only work in class on her assignment when the teacher stands over her to monitor the progress.

Dialogue for Creative Christina

Uh...hi. My name is Christina. I was told to come and talk to you - I think about how I like art..or maybe it was music...I forget. Anyway, I am suppose to be here. Maybe it's because I don't do good in school. My mother says I'm just like my father. He was - or is - real spacey. He's not dead or anything, but he's not around much. My mother says that I can't handle too much freedom - that's why I never finish my work. My mother also says...

Question for Your Student

Small Group Directions: Aggressive Archie - Fallacy #4

Directions: Appoint a facilitator/recorder. Get a volunteer to act the part of your student on the panel presentation. The facilitator reads the description of your student. Together decide on some gestures and speech patterns to help your volunteer act the part of your student. Complete the dialogue for your student with two or more sentences. Decide on a question to ask your student during the panel presentation that relates to how the school views him. Decide on the student's answer.

Description of Student

"Aggressive Archie" is an 11 year old middle school boy who stays in trouble. He is very big for his age group and is the school's bully. He spends most of his days in the principal's or counselor's office because of some kind of aggressive behavior. He has very poor skills in reading and math and tests far below grade level in all areas. He says he will drop out of school as soon as he is 16 and most teachers hope that he does.

Dialogue for Aggressive Archie

Hey...like man...I don't know why I was asked to come and talk to teachers. Most of them... man... they hate my guts. You know, I have always been in trouble with teachers... like even... man... like even when I was little. Man... I have always been in trouble with you all, or people like you. I mean, man... classrooms are like jails... you can't ever say anything... unless you are one of the smart guys. Man... I can't believe that they asked me to talk to you... like I don't like school. I mean... maybe if I was smart I would. Man... those smart kids never get into trouble. Man I'm always in trouble because....

Question for Your Student

Small Group Directions: Tracked Tracey - Fallacy #5

Directions: Appoint a facilitator/recorder. Get a volunteer to act the part of your student on the panel presentation. The facilitator reads the description of your student. Together decide on some gestures and speech patterns to help your volunteer act the part of your student. Complete the dialogue for your student with two or more sentences. Decide on a question to ask your student during the panel presentation that relates to how the school views her. Decide on the student's answer.

Description of Student

"Tracked Tracey" is a 7 year old girl who is very immature physically, emotionally, and cognitively. She is in the second grade and spends most of her time just playing. She has not really started to read, although she has a few sight words. The teacher feels she might be happier in the primary program classroom next door, but she doesn't think she will ever catch up. She will be tested for a special education placement very soon.

Dialogue for Tracked Tracey

Un... un... my name is Tracey. Un... I'm in the second grade, but I'm not really a good second grader because I haven't learned to read yet. I'm in the "turtle" reading group. My teacher says we will get there, but we just take longer... I'm not sure what that means. I guess it's a way of saying we are slow at things. My grandmother says "slow" people don't finish high school and she really wants me to do that. I guess I had better hurry up and learn things... cause I want to make my grandmother proud of me. She says...

Question for Your Student

Small Group Directions: Cool Carl - Fallacy #6

Directions: Appoint a facilitator/recorder. Get a volunteer to act the part of your student on the panel presentation. The facilitator reads the description of your student. Together decide on some gestures and speech patterns to help your volunteer act the part of your student. Complete the dialogue for your student with two or more sentences. Decide on a question to ask your student during the panel presentation that relates to how the school views him. Decide on the student's answer.

Description of Student

"Cool Carl" is a 15 year old male who is the leader of a rather disruptive group of middle school students. He seems bright, but doesn't seem to care about school or his grades. He tries to remain aloof, acting very bored with all aspects of school. For a while he was in a class for the learning disabled, but later it was discovered his skill level was above eligibility. He is from a very poor, single-mother home and often cuts school.

Dialogue for Cool Carl

Well, my name is Carl and I'm here to tell you guys school is boring. I have never liked school. All my life teachers have said, "Carl, you can do better." Then they give me some stupid drill or ditto sheet to do. All those smart kids get to leave class for special projects and stuff like that. I'm so tired of learning the same old stuff year after year. The other day a teacher gave me some really easy math work to do and she got all over my case cause I didn't finish it. I got the answers, but anybody could have done that. I never get to go to computer lab - cause I haven't finished by stupid work.....

Question for Your Student

Small Group Directions: Silly Sarah - Fallacy #7

Directions: Appoint a facilitator/recorder. Get a volunteer to act the part of your student on the panel presentation. The facilitator reads the description of your student. Together decide on some gestures and speech patterns to help your volunteer act the part of your student. Complete the dialogue for your student with two or more sentences. Decide on a question to ask your student during the panel presentation that relates to how the school views her. Decide on the student's answer.

Description of Student

"Silly Sarah" is a 14 year old girl who is just beginning high school. Her father is a doctor and the family has tended to spoil her. She gets most anything she wants and has never been required to complete assignments or to do well in school. She has been known to pay someone to do her projects in middle school and she constantly copies homework assignments. She is very friendly and outgoing and has lots of friends. She really worries about her appearance more than her school work.

Dialogue for Silly Sarah

Heeeeeeee (giggling) Hi! I'm Sarah. Heeeeeeeee... I'm absolutely thrilled to come and talk to you. My father was very pleased that I was asked to tell you my overall impression of school. Heeeeee, Well, I think an education is very important. I mean, just look at what it did for my Daddy. He is very important. Soooooo, I know school is very important. I'm going to start working very hard this year. Oh, heeeeeeee, one of my teachers said I didn't have enough basic skills ... or something... to do stuff to get you ready for college. But, I know I can... besides Daddy will help me if I don't understand something. He...

Question for Your Student

ACTIVITY D: THE IMPACT OF THE FALLACIES

OBJECTIVES: (1) To study the impact of the common fallacies on the at-risk population as a whole
(2) To highlight the research associated with the fallacies

TIME: 30 minutes

EQUIPMENT: None

MATERIALS: 7 pieces of newsprint placed on walls around room. Each one states one of the common fallacies
Handout I,D:1

PROCESS:

1. Explain that we have explored some common fallacies and views about instruction for individual students considered at risk. Now we will relate these fallacies to the general population of at-risks students.
2. Divide participants into 7 groups. Each group stands in front of one sheet of paper (with a fallacy listed) and writes possible impacts of the fallacy on at-risk students. Allow approximately 3 minutes. Each group then moves to the right and spends approximately 3 minutes reviewing what the previous group wrote and adding any additional impacts. Allow approximately 2 minutes and repeat until all groups have had a chance at each sheet. Ask for groups to move around room once again and explore all sheets.
3. Through large group discussion, relate what has been written by participants to research presented on Handout I,D:1.

Activity I.D: Handout 1

Common Fallacies about Instruction for the At-Risk Student

The fallacies listed below summarize much of the research on the common "wisdoms" about children of poverty. These highlight the common fallacies of the broader at-risk population.

Fallacy # 1. Students are deficient in their preparation for school and their families have given them a bad start in life (Knapp, Turnbull and Shields, 1990). These assumptions often foster stereotypical ideas about the capabilities of a child and detract from an accurate assessment of the child's real problems and potential. Strengths of a cultural background may be lost. The consequences of such fallacies often lead to low expectations, failure to examine what the school does to exacerbate problems, and possible misdiagnosis of learning problems .

Fallacy # 2. Sequencing and challenge in the curriculum should be broken up into fixed sequences of discrete skills which are organized from the simplest (the basics) to the more complex (higher-order skills). Instruction should typically emphasize mastery of these skills (Knapp, Turnbull and Shields, 1990). Such assumptions underestimate a student's capabilities, postpone challenge, fail to provide context, and reinforce failure.

Fallacy # 3. The role of the teacher is to provide only direct instruction (Knapp, Turnbull and Shields, 1990). This implies such aspects as teacher-controlled situations, careful structuring of tasks, and whole-group formats. A critique of such approaches suggests that students do not learn to think for themselves and become dependent on the teacher to monitor progress, to motivate, and to structure all aspects of learning.

Fallacy # 4. A uniform structure provides students clear behavioral expectations (Knapp, Turnbull and Shields, 1990). While structure is needed, the overall theme of the classroom may become one of behavior management. This tone may inhibit the freedom needed to explore, to contribute, and to move beyond basic skill development.

Fallacy # 5. Low-achieving students should be placed in homogeneous groups for success (Knapp, Turnbull and Shields, 1990). The problem with this fallacy is that at-risk students often become permanently segregated into tracks and they miss the exposure to the culture of the higher achieving students. Tracking affects learning, future orientations, peer relationships, and impressions of school environment (Vanfossen, Jones, & Spade, 1987).

Fallacy # 6. Low-achieving students need easy work. The problem with this fallacy is that students with easy learning tasks attribute success to the easiness and their self-esteem is not enhanced. Clifford (1990) suggests that a moderate probability of success, not easy tasks, is essential to intrinsic motivation. Learning for the at-risk learner should, therefore, stretch capabilities. Moderate academic risk taking should be encouraged without external constraints such as surveillance, deadlines, threats, bribes and rewards.

Fallacy # 7. At-Risk students must always be given special consideration about their efforts. The problem with this fallacy is that students see themselves as helpless and assume no responsibility for their failure or success (Alderman, 1990). Only performance goals rather than learning goals are stressed.

II. SUCCESSFUL INSTRUCTION FOR AT-RISK STUDENTS

II. SUCCESSFUL INSTRUCTION FOR AT-RISK STUDENTS: BACKGROUND INFORMATION

Introduction

Having become aware of the definition of at-risk and some common fallacies about this population, it is important to explore more closely the factors associated with successful instructional techniques that research has shown effective. Some of these are general in nature and relate to the common fallacies. Others are more specific strategies. It is also important to note that generalizations of classroom practice must be made to Extended School Services. Most all the pertinent research relates to the classroom or to compensatory programs such as Chapter One. Additionally, the research is clear that parent involvement is crucial to the educational progress of the at-risk learner and therefore this important aspect will be briefly explored. This section of the training module will: (1) explore general measures to counteract the fallacies mentioned earlier; (2) examine instructional techniques for the at-risk learner such as grouping, the use of technology, reading, writing, and math teaching strategies, enhancing self-esteem, and "practical intelligences"; and (3) discuss parent involvement.

Counteracting the Fallacies

Just recognizing the common fallacies about the at-risk learner is not enough. Steps must be taken to overcome them. Individuals working with at-risk students who adhere to these common misconceptions must strive to change their thinking. Although alternative strategies should not completely abandon traditional practices, Knapp, Turnbull and Shields (1990) assert that teachers should:

* Respect the students' cultural backgrounds
* Encourage students to draw and build on the experiences they have while exposing them to new opportunities
* Explain the assumptions, expectations, and procedures - the culture - of the school
* Focus on meaning and comprehension
* Balance routine with novel and complex tasks
* Provide a context for skill development
* Influence attitudes and beliefs about academic content
* Eliminate unnecessary redundancy
* Teach explicitly underlying thinking processes along with skills
* Encourage students to learn from each other
* Gradually turn the responsibility for learning over to the learner
* Develop classrooms which are action oriented and rooted in interesting and engaging academic activities for all children

* Behavior expectations must be appropriate to the academic work at hand
* Use heterogeneous grouping through cooperative and team learning
* Integrate supplementary assistance whenever possible

Clifford (1990) further suggests that teachers should:

* Provide tasks which have a moderate chance of success - not guaranteed success
* Encourage risk taking on tasks
* Minimize external constraints such as rewards and threats

To summarize, counteracting fallacies of the at-risk student incorporates techniques usually employed with "gifted" students. High quality educational opportunities for the at-risk learner should recognize and strengthen the whole student and not concentrate on simple skill development and rote learning.

Successful Instructional Techniques

Grouping

Much research has been done on ability grouping. French and Rothman (1990 pp.2) reviewed the literature and presented a summary of the findings. They concluded that the research reveals little evidence that ability grouping improves academic achievement. There is, however, overwhelming evidence that ability grouping retards academic progress of students in low- and middle-ability grouping. In most cases, the slower pace of instruction and the lower skill levels so often used in lower-ability classes hinder, rather than enhance, student motivation and achievement.

There are various alternatives to ability grouping and perhaps the one best researched is cooperative learning. With this technique, small heterogeneous groups of students work together to solve problems or organize material presented by the teacher and to transmit the group's understanding to each individual. The research has consistently found that these methods increase pupils' achievement in a variety of subjects (Slavin, 1989). In one study, math pupils gained an average of 1.66 grade equivalents in 18 weeks while the control groups gained 0.61. In another study of language arts, pupils gained 64% of a grade equivalent more than control pupils.

The implication to programs, such as Extended School Services, is that cooperative learning groups should be utilized whenever possible. When students (of the same approximate age) participate in group projects, they should not be categorized according to abilities.

The Use of Technology

Hornbeck (1990), along with others, suggests that one of the best techniques for the at-risk learner is the use of technology. He cautions, however, that technology should not be used just for

drill and practice of basic skills. Computers should be viewed as a way of enabling the at-risk student to think critically or analytically, to solve problems, and to draw inferences. The software for such thinking processes must, therefore, be chosen carefully and made available to at-risk students. It should be noted as well, that even though drill and practice have lost favor with many educators, the research shows that this type of computer-assisted instruction increases student achievement, reduces learning time, establishes positive feelings toward both computers and school work and is effective with at-risk students (Griswold, 1986).

Another reason for the use of computers is to give the student some control over their learning. The research shows a positive correlation between perceived locus of control and a variety of cognitive behaviors associated with achievement (Swan et. al, 1990). Computer based instruction has been shown to increase the student's perceived locus of control of learning and to raise the standardized test scores of educationally disadvantaged students in grades 3 through 12. The students felt in charge of their own learning.

The implication to Extended School Services is that computer based instruction should be utilized. Software should encompass some skill building and higher level thinking processes.

Instructional Strategies for Specific Content Areas

In a report of a major federal study of mathematics and literacy instruction in schools that serve students at greatest risk for academic failure, some interesting preliminary findings were reported (Knapp et. al, 1991). Specific instructional strategies according to content areas were also suggested.

Math. Two strategies have been identified for maximizing mathematical understanding and reasoning: (1) emphasizing conceptual understanding and skill building and (2) expanding the array of mathematical topics beyond arithmetic or computations. In short, math is integrated.

Reading. Although not as easily categorized, strategies for maximizing reading for understanding included: (1) many opportunities to read whole text, both orally and silently; (2) integration of reading and writing instruction; (3) focusing on comprehension and interpretation of what is read through explicit teaching of strategies for comprehending text; (4) deemphasizing the teaching of discrete skills in isolation of text; and (4) providing opportunities to discuss what is read and to extend knowledge gained from reading.

Writing. For improvement in writing skills, teachers should adopt strategies similar to those described for reading: (1) integrate writing with other content areas of the curriculum; (2) teach the process of writing; and (3) construct a social context for writing that motivates students and encourages communication with others.

The implications to Extended School Services are clear. Integrate math along with skill development in computation and utilize a holistic approach to reading and writing whenever possible.

Self-Esteem

Because low self-esteem is a common characteristic of students at risk for poor educational outcomes, it should be dealt with overtly in programs. A four-year California study found that students in a program designed specifically to enhance self-esteem resulted in fewer days of absenteeism per semester, better homework completion, higher participation in extracurricular activities, and a higher percentage of graduation from high school than the control group (cited in Canfield). A ten step model is proposed:

1. Help students assume an attitude of 100 percent responsibility for their behavior.
2. Focus on the positive; have students share achievements.
3. Encourage students to monitor self-talk - to replace negative thoughts with positive ones.
4. Use support groups in the classroom.
5. Help students broaden the awareness of their strengths and resources.
6. Encourage students to clarify their vision - their goals.
7. Explore goals and objectives and write them down.
8. Use visualizations - see their objectives met.
9. Encourage action - do the doing.
10. Respond to feedback and persevere - show how we can learn from our mistakes.

Practical Intelligence

Sternberg, Okagaki, and Jackson (1990) suggest that an often forgotten element in helping students succeed in school is "practical-intelligence-for-school" (PIFS). The authors suggest that some students should be taught implicit expectations of teachers that some children (particularly high achievers) already know. Practical intelligence for school curriculum encompasses three areas. (1) Managing yourself - by understanding the various kinds of intelligences and learning styles as they may relate to the student. (2) Managing tasks - by exploring methods for solving problems in general and specific school problems. (3) Cooperating with others - by studying communication techniques and exploring methods of fitting into the school and understanding peer networks and relationships.

The implications for extended school services is to incorporate practical intelligence concepts into the programs serving at-risk students.

Importance of Parent Involvement

Many studies have shown that parent involvement is the key to helping students improve their academic performance (McCormick, 1989). One major research project by John Hopkins University (cited in McCormick) found that regardless of social class, students have a better chance of success if teachers work with parents so that they are involved in their children's schoolwork. Studies also indicate that parents from at-risk families must often be shown very specifically how to help their children. They are interested, but generally have inferior education themselves and lower prestige jobs which make them dependent upon teachers to show them what is best for their children academically (Lareau, 1987).

The National Association of State Boards of Education (NASBE, 1988) suggests forming partnerships with parents. Schools should:

* Involve parents in decisionmaking regarding the curriculum, evaluation and policies of programs;
* Assure opportunities and access for parents to observe and volunteer in their child's program;
* Provide inservice training on parent involvement and family support;
* Provide time for teachers to plan and conduct parent conferences and home visits;.
* Provide parents with materials and incentives to work with their children at home;
* Encourage local businesses to provide release time for parents to volunteer in school and to participate in conferences;

In short, programs serving at-risk students must involve the parents.

However, actually getting parents involved is often another matter. Galen (1991) suggests eight steps which can be taken to help parent involvement in the classroom. These are also applicable to Extended School Services.

1. Determine the needs of the program which can involve parents (extra hands, materials, etc.)
2. Establish a committee of students, tutors, and parents to further establish guidelines for meeting those needs with parents.
3. Set specific goals for involvement by the parents (one visit to the program by every parent, etc.)
4. Train parents who are willing to work in Extended School Services.
5. Develop specific measures to spread the word about becoming involved with Extended School Services.
6. Brainstorm for possible solutions for those parents who cannot or are not willing to come to the program.

7. Establish ways to reinforce parents who do come and show an interest in the program.
8. Continually evaluate the effectiveness of outreach efforts for parent involvement.

In a study of Chapter I in the Houston Independent School District, parents were interviewed about the extent of their involvement in extended-day services (Nechworth, Cisneros, & Sanchez, 1990). The type of questions asked reveal possible measures for assisting in parent involvement.

1. Do all parents know the purpose of the program and why their child attends?
2. Have all parents been informed about progress, problems, etc. with their child?
3. Has every parent been invited to visit the program or to volunteer?
4. Has every parent been given the opportunity to receive information on how to help their child at home?
5. How does each parent feel about Extended School Services?

OVERVIEW

OBJECTIVES: (1) To explore methods for overcoming the fallacies identified earlier
(2) To study specific instructional techniques for the at-risk learner
(3) To explore methods to enhance parent involvement

TOTAL TIME: 2 hours and 45 minutes

ACTIVITIES: A. Counteracting the Fallacies
B. Successful Instructional Techniques
C. Importance of Parent Involvement

EQUIPMENT: Overhead projector and screen

MATERIALS: Flip chart or newsprint
Markers
Handouts as indicated
Transparencies as indicated
Readings as indicated
Small group instructions as indicated

NOTE: It is strongly recommended that homogenous grouping by elementary, middle, and high school be utilized with "Successful Instructional Techniques" and "Importance of Parent Involvement". Each group then completes the assignments based on their particular circumstances.

ACTIVITY A: COUNTERACTING THE FALLACIES

OBJECTIVE: To become familiar with general methods of counteracting the common fallacies about instruction with the at-risk population

TIME: 30 minutes

EQUIPMENT: Overhead projector and screen

MATERIALS: Handout II,A: 1
Transparency II,A:1
Readings #1, 2 & 3

PROCESS:

1. Explain that we have explored common feelings of the at-risk learner and some of the fallacies associated with the at-risk student. Before our attention can be turned to specific instructional strategies, we must first explore broad ways to counteract the common fallacies.
2. Using Transparency II,A: 1, briefly introduce information contained in Handout II,A:1 which broadly helps to counteract the fallacies. Ask the participants to break into groups of three. Ask each group to: (a) appoint a facilitator/recorder; (b) together review and complete Handout II,A:1. Groups are to discuss the list on Handout II,A:1 and decide on five attitudes, beliefs, or techniques which they consider most important in their school situations and write the five on Handout II,A:1. Allow approximately 15 minutes.
3. Instruct the small groups to now explore their list of five and decide on one to develop further by stating at least two ways in which they will actually incorporate this attitude, belief, or technique into an extended school services program. For example, a very specific way to incorporate "respect for students' culture" might be to display aspects of that culture in the room or to experiment with cooking that is part of a heritage or culture.
4. For closure, ask each group to share their work with the whole group. Copies of each groups work should be made available to all participants if possible.
5. Explain that the purpose of this activity was to encourage participants to acquire <u>general</u> attitudes which will overcome fallacies about at-risk students and to relate these attitudes to specific practices in their programs.
6. For more additional information, suggest that participants study Reading # 1. Explain that generalization from the articles can be made to Extended School Services.

Counteracting the Fallacies

Just recognizing the common fallacies about the at-risk learner is not enough. Steps must be taken to overcome them. Individuals working with at-risk students who adhere to these common misconceptions must strive to change their thinking. Although alternative strategies should not completely abandon traditional practices, Knapp, Turnbull and Shields (1990) assert that teachers should:

* Respect the students' cultural backgrounds
* Encourage students to draw and build on the experiences they have while exposing them to new opportunities
* Explain the assumptions, expectations, and procedures - the culture - of the school
* Focus on meaning and comprehension
* Balance routine with novel and complex tasks
* Provide a context for skill development
* Influence attitudes and beliefs about academic content
* Eliminate unnecessary redundancy
* Teach explicitly underlying thinking processes along with skills
* Encourage students to learn from each other
* Gradually turn the responsibility for learning over to the learner
* Develop classrooms which are action oriented and rooted in interesting and engaging academic activities for all children
* Behavior expectations must be appropriate to the academic work at hand
* Use heterogeneous grouping through cooperative and team learning
* Integrate supplementary assistance whenever possible

Clifford (1990) further suggests that teachers should:

* Provide tasks which have a moderate chance of success - not guaranteed success
* Encourage risk taking on tasks
* Minimize external constraints such as rewards and threats

To summarize, the research suggests techniques usually employed with "gifted" students. Truly high quality educational opportunities for the at- risk learner should recognize and strengthen the whole student and not concentrate on simple skill development and rote learning.

Clifford, M.M. (1990). Students need challenge, not easy success. Educational Leadership, 48(1), 22-26.

Knapp, M.S., Turnbull, B.J. & Shields, P.M. (1990). New Directions for Educating the children of poverty. Educational Leadership, 48(1), 4-8.

Counteracting the Fallacies

Directions: (1) Appoint a facilitator/recorder. (2) Using the list on Handout II.A:1, decide on five attitudes, beliefs, or techniques your group feels are the most important in overcoming the fallacies associated with the at-risk learner. (3) Take one of the five listed and develop further by describing two strategies to actually incorporate this attitude, belief, or technique into Extended School Services.

(1) Facilitator_____

(2) Your group's five most important attitudes, beliefs or techniques are:

(3) Name two ways in which you will incorporate one of the five attitudes, beliefs or techniques into Extended School Services.

Counteracting the Fallacies

* Respect the students' cultural backgrounds
* Encourage students to draw and build on the experiences they have while exposing them to new opportunities
* Explain the assumptions, expectations, and procedures - the culture - of the school
* Focus on meaning and comprehension
* Balance routine with novel and complex tasks
* Provide a context for skill development
* Influence attitudes and beliefs about academic content
* Eliminate unnecessary redundancy
* Teach explicitly underlying thinking processes along with skills
* Encourage students to learn from each other
* Gradually turn the responsibility for learning over to the learner
* The classroom should be action oriented and rooted in interesting and engaging academic activities for all children
* Behavior expectations must be appropriate to the academic work at hand
* Use heterogeneous grouping through cooperative and team learning
* Integrate supplementary assistance whenever possible
* Provide tasks which have a moderate chance of success - not guaranteed success
* Encourage risk taking on tasks
* Minimize external constraints such as rewards and threats

Adapted from Knapp, Turnbull, & Shields, (1990); and Clifford (1990).

ACTIVITY B: SUCCESSFUL INSTRUCTIONAL TECHNIQUES

OBJECTIVES: (1) To become familiar with instructional techniques research which has been found to be effective with the at-risk learner
(2) To relate these strategies to Extended School Services

TIME: 1 hour

EQUIPMENT: None

MATERIALS: Small Group Directions II,C: 1-7
Readings #2, 3, & 4
Transparency II,B:1

PROCESS:

1. Explain that we have explored general strategies to counteract the fallacies associated with the at-risk learner. Now we must explore specific instructional techniques to use with the student.
2. Present the content found in background information on factors associated with successful instruction for the at-risk learner using Transparency II,B:1 as a visual aid. Stress that much of the research pertains to the regular classroom and generalizations must be made to programs such as Extended School Services.
3. If participants represent only one age category of school (elementary, middle, or high school), ask the participants to break into groups of four or five. Assign each group one complete set of small group directions. Each of the seven directions highlights one specific instructional technique. For presentations where participants represent elementary, middle and high school, large homogenous groups should be formed according to those categories. Then, if necessary, break into groups of four or five and assign each of the groups one complete set of small group directions. Remind the groups to appoint a facilitator/recorder who will later report the group's work. Explain that some groups may want to refer to specific readings as mentioned in the directions for the small group. State again that most of the research on strategies for the at-risk learner has been done in the regular classroom so generalization must be made to Extended School Services.
4. If time permits, review each group's findings as a large group.

Small Group Directions: Grouping

Directions: Appoint a facilitator/recorder and a reader. The reader should read the information provided below. The facilitator should lead a discussion focused on the implications to Extended School Services.

Research

Much research has been done on ability grouping. French and Rothman (1990 pp.2) reviewed the literature and presented a summary of the findings. They concluded that the research reveals little evidence that ability grouping improves academic achievement. There is, however, overwhelming evidence that ability grouping retards academic progress of students in low- and middle-ability grouping. In most cases, the slower pace of instruction and the lower skill levels so often used in lower-ability classes hinder, rather than enhance, student motivation and achievement.

There are various alternatives to ability grouping and perhaps the one best researched is cooperative learning. With this technique, small heterogeneous groups of students work together to solve problems or organize material presented by the teacher and to transmit the group's understanding to each individual. The research has consistently found that these methods increase pupils' achievement in a variety of subjects (Slavin, 1989). In one study, math pupils gained an average of 1.66 grade equivalents in 18 weeks while the control groups gained 0.61. In another study of language arts, pupils gained 64% of a grade equivalent more than control pupils.

Implications to Extended School Services

Small Group Directions: The Use of Technology

Directions: Appoint a facilitator/recorder and a reader. The reader should read the information provided below. The facilitator should lead a discussion focused on the implications to Extended School Services.

Research

Hornbeck (1990), along with others, suggests that one of the best techniques for the at-risk learner is the use of technology. He cautions, however, that technology should not be used just for drill and practice of basic skills. Computers should be viewed as a way of enabling the at-risk student to think critically or analytically, to solve problems, and to draw inferences. The software for such thinking processes must, therefore, be chosen carefully and made available to at-risk students. It should be noted as well, that even though drill and practice have lost favor with many educators, the research shows that this type of computer-assisted instruction increases student achievement, reduces learning time, establishes positive feelings toward both computers and school work and is effective with at-risk students (Griswold, 1986).

Another reason for the use of computers is to give the students some control over their learning. The research shows a positive correlation between perceived locus of control and a variety of cognitive behaviors associated with achievement (Swan et. al, 1990). Computer based instruction has been shown to increase the student's perceived locus of control of learning and to raise the standardized test scores of educationally disadvantaged students grades 3 through 12. The students felt in charge of their own learning.

Implications to Extended School Services

Small Group Directions: Math Strategies

Directions: Appoint a facilitator/recorder and a reader. The reader should read the information provided below. The facilitator should lead a discussion focused on the implications to Extended School Services.

Research

In a report of a major federal study of mathematics and literacy instruction in schools that serve students at greatest risk for academic failure, some interesting preliminary findings have been reported (Knapp et. al, 1991). (See Reading #2)

Math. Two strategies have been identified for maximizing mathematical understanding and reasoning: (1) emphasizing conceptual understanding and skill building and (2) expanding the array of mathematical topics beyond arithmetic or computations. In short, math is integrated.

Implications to Extended School Services

Small Group Directions: Reading Strategies

Directions: Appoint a facilitator/recorder and a reader. The reader should read the information provided below. The facilitator should lead a discussion focused on the implications to Extended School Services.

Research

In a report of a major federal study of mathematics and literacy instruction in schools that serve students at greatest risk for academic failure, some interesting preliminary findings have been reported (Knapp et. al, 1991). (See Reading #2)

Reading. Although not as easily categorized, strategies for maximizing reading for understanding included: (1) many opportunities to read whole text, both orally and silently, (2) integration of reading and writing instruction, (3) focusing on comprehension and interpretation of what is read through explicit teaching of strategies for comprehending text, (4) deemphasizing the teaching of discrete skills in isolation of text, and (4) providing opportunities to discuss what is read and to extend knowledge gained from reading.

Implications to Extended School Services

Small Group Directions: Writing Strategies

Directions: Appoint a facilitator/recorder and a reader. The reader should read the information provided below. The facilitator should lead a discussion focused on the implications to Extended School Services.

Research

In a report of a major federal study of mathematics and literacy instruction in schools that serve students at greatest risk for academic failure, some interesting preliminary findings have been reported (Knapp et. al, 1991). (See Reading #2)

Writing. Strategies to maximize meaningful written communication coincide with those utilized for reading instruction. They are: (1) integrating writing with other areas of the curriculum, (2) emphasizing meaningful communication as the goal of writing and simultaneously deemphasizing language-mechanics skills and correctness, (3) teaching the process of writing, and (4) constructing a social context for writing that motivates students and encourages communications with others.

Implications to Extended School Services

Small Group Directions: Self-Esteem

Directions: Appoint a facilitator/recorder and a reader. The reader should read the information provided below. The facilitator should lead a discussion focused on the implications to Extended School Services.

Research

Because low self-esteem is a common characteristic of students at risk for poor educational outcomes, it should be dealt with overtly in programs. A four-year California study found that students in a program designed specifically to enhance self-esteem resulted in fewer days of absenteeism per semester, better homework completion, higher participation in extracurricular activities, and a higher percentage of graduation from high school than the control group (cited in Canfield). (See Reading #3) A ten step model is proposed:

1. Help students assume an attitude of 100 percent responsibility for their behavior.
2. Focus on the positive; have students share achievements.
3. Encourage students to monitor self-talk - to replace negative thoughts with positive ones.
4. Use support groups in the classroom.
5. Help students broaden the awareness of their strengths and resources.
6. Encourage students to clarify their vision - their goals.
7. Explore goals and objectives and write them down.
8. Use visualizations - see their objectives met.
9. Encourage action - do the doing.
10. Respond to feedback and persevere - show how we can learn from our mistakes.

Implications to Extended School Services

Small Group Directions: Practical Intelligence

Directions: Appoint a facilitator/recorder and a reader. The reader should read the information provided below. The facilitator should lead a discussion focused on the implications to Extended School Services.

Research

Sternberg, Okagaki, and Jackson (1990) suggest that an often forgotten element in helping students succeed in school is "practical-intelligence-for-school" (PIFS). The authors suggest that some students should be taught implicit expectations of teachers that some children (particularly high achievers) already know. Practical intelligence for school curriculum encompasses three areas. (1) Managing yourself - by understanding the various kinds of intelligences and learning styles as they may relate to the student. (2) Managing tasks - by exploring methods for solving problems in general and specific school problems. (3) Cooperating with others - by studying communication techniques and exploring methods of fitting into the school and understanding peer networks and relationships. (See Reading #4)

Implications to Extended School Services

INSTRUCTIONAL STRATEGIES

Appropriate Grouping

Use of Technology

Math Strategies

Reading Strategies

Writing Strategies

Enhance Self-Esteem

Incorporate Practical Intelligences

ACTIVITY C: IMPORTANCE OF PARENT INVOLVEMENT

OBJECTIVES: (1) To become familiar with methods for facilitating parent involvement with the at-risk learner.

TIME: 45 minutes

EQUIPMENT: Overhead projector and screen

MATERIALS: Transparency II.C: 1, 2, & 3
Handout II.C: 1
Flip Chart and marker

PROCESS:

1. Explain that we have explored general strategies to counteract the fallacies associated with the at-risk learner and we have explored specific instructional techniques to use with the student.
2. Review in detail the section from the "Background Information" which relates to the importance of parent involvement for the at-risk learner. Use Transparencies II, C:1, 2, and 3 as visual aids.
3. Explain that parent involvement can be very difficult to get started. Ask participants to think about what was presented in the review of the "Background Information" and to consider barriers to parent involvement in their schools.
4. For presentations where participants represent elementary, middle and high school, large homogenous groups should be formed according to those categories. Then break into groups of three or four. For groups representing only one category of school, break into groups of three or four from the general large group. Remind the groups to appoint a facilitator/ recorder who will later report the group's findings to the large group. Ask each group to complete Handout II.C: 1 which will help identify barriers to parent involvement and possible solutions. Allow approximately 15 minutes for small group work.
5. As a large group, review each group's findings. Copies of each group's work should be made available to all groups if possible. Ask for a volunteer to record solutions on flip chart as well.
6. Add closure by again stressing that the research indicates that effective programs for at-risk students must have parent involvement and that the solutions to common barriers should be tried in their schools.

PARENT INVOLVEMENT STRATEGIES

***Directions:** Appoint a facilitator/recorder and a reader. The reader should read out loud the information below which summarizes ideas on parent involvement (NASBE, 1988; Galen, 1991). The facilitator should then lead a discussion and list five barriers to the parent involvement strategies using the attached chart. After listing the five barriers the facilitator should lead a discussion on possible solutions to overcoming each barrier.*

- Involve parents in decisionmaking regarding the curriculum, evaluation and policies of programs.
- Assure opportunities and access for parents to observe and volunteer in their child's program.
- Provide inservice training on parent involvement and family support.
- Provide time for teachers to plan and conduct parent conferences and home visits.
- Provide parents with materials and incentives to work with their children at home.
- Encourage local businesses to provide release time for parents to volunteer in school and to participate in conferences.
- Determine the needs of the program which can involve parents (extra hands, materials, etc.)
- Establish a committee of students, tutors, and parents to further establish guidelines for meeting those needs with parents.
- Set specific goals for involvement by the parents (one visit to the program by every parent, etc.)
- Train parents who are willing to work in Extended School Services.
- Develop specific measures to spread the word about becoming involved with Extended School Services.
- Brainstorm for possible solutions for those parents who cannot or will not come to the program.
- Establish ways to reinforce parents who do come and show an interest in the program.
- Continually evaluate the effectiveness of outreach efforts for parent involvement.

BARRIERS TO PARENT INVOLVEMENT AND POSSIBLE SOLUTIONS

Barriers	Solutions
1.	
2.	
3.	
4.	
5.	

The National Association of State Boards of Education (NASBE, 1988) suggests forming partnerships with parents.

SCHOOLS SHOULD

* Involve parents in decision making regarding the curriculum, evaluation and policies of programs.

* Assure opportunities and access for parents to observe and volunteer in their child's program.

* Provide inservice training on parent involvement and family support.

* Provide time for teachers to plan and conduct parent conferences and home visits.

* Provide parents with materials and incentives to work with their children at home.

* Encourage local businesses to provide release time for parents to volunteer in school and to participate in conferences.

Galen (1991) suggests eight steps which can be taken to help parent involvement in the classroom. These are also applicable to Extended School Services.

STEPS TO ASSIST PARENT INVOLVEMENT

1. Determine the needs of the program which can involve parents (extra hands, materials, etc.)

2. Establish a committee of students, tutors, and parents to further establish guidelines for meeting those needs with parents.

3. Set specific goals for involvement by the parents (one visit to the program by every parent, etc.)

4. Train parents who are willing to work in Extended School Services.

5. Develop specific measures to spread the word about becoming involved with Extended School Services.

6. Brainstorm for possible solutions for those parents who cannot or will not come to the program.

7. Establish ways to reinforce parents who do come and show an interest in the program.

8. Continually evaluate the effectiveness of outreach efforts for parent involvement.

Activity II. C: Transparency 3

In a study of Chapter 1 in the Houston Independent School District, parents were interviewed about the extent of their involvement in extended-day services (Nechworth, Cisneros, & Sanchez, 1990). The types of questions asked reveal possible measures for assisting in parent involvement.

QUESTIONS TO ASK YOURSELF

1. Do all parents know the purpose of the program and why their child attends?

2. Have all parents been informed about progress, problems, etc., with their child?

3. Has every parent been invited to visit the program or to volunteer?

4. Has every parent been given the opportunity to receive information on how to help their child at home?

5. How does each parent feel about Extended School Services?

III. PROGRAMMATIC SUGGESTIONS

III. PROGRAMMATIC SUGGESTIONS: BACKGROUND INFORMATION

Introduction

Having acquired an awareness of what is meant by at-risk and some common fallacies associated with the term, and having explored various instructional techniques associated with successful programs serving the at-risk student, attention must be turned to application of the knowledge. This section of the training module presents: (1) overall characteristics of successful programs of at-risk students and (2) methodologies to implement successful programs in participants' schools.

General Characteristics of Successful Programs

Reviews of research by the U.S. Department of Education (Stringfield, Billig, & Davis, 1991) conclude that successful compensatory programs have the following characteristics:

* Clear goals and objectives which have high expectations for student learning and behavior
* Coordination with regular school programs
* Parent and community involvement
* Appropriate instructional materials, methods, and approaches
* Close monitoring of student progress along with regular feedback
* Recognition and rewards for excellence
* Use of evaluation results for program improvement.

To implement high quality programs for at-risk students requires a commitment that goes beyond specific teaching strategies. It truly encompasses not only the time with the student, but also general administrative issues as well.

Methodologies for Implementation

A publication by the National School Board Association (McCormick, 1989) highlights specific suggestions for program implementation in individual school districts.

* Establish a policy that commits the schools to helping all children learn.
* Examine the needs of the community for supporting students, such as child care, health services, etc.
* Develop a demographic profile of the school system to determine who and how many might be at-risk.
* Develop a definition of at-risk that is pertinent for each school population. Include characteristics such as absenteeism, chemical dependency, poor grades, low test scores, limited extracurricular participation, lack of identification with school,

disruptive behavior, boredom with school, rebellious attitudes, verbal and language deficiencies, learning disabilities, pregnancy, poverty, and family mobility.

* Track identified students in terms of progress and use of the program.
* Constantly evaluate the implementation strategies of the program.
* Encourage flexibility in helping students at risk.
* Involve parents in the children's schooling.
* Work with local businesses and social service agencies for support.

The report further states that when developing programs for at-risk youth, schools should keep in mind the elements indicated by research to be most effective:

* Small class size and tutoring (and small groups while tutoring)
* Appropriate instructional style (as described earlier)
* Counseling programs (which work on self-esteem and behavior management)
* Alternative programs and settings
* Employment skills training
* Parent involvement
* Specially trained and empowered staff
* Flexible scheduling
* Help from the community
* Special services such as health clinics, job placement services, etc.

Again, successful implementation requires a holistic approach to serving the at-risk learner. Although the above information relates to both the classroom and to tutoring programs, it is applicable to Extended School Services.

OVERVIEW

OBJECTIVES:
(1) To highlight research on general program characteristics that assist in high quality programs for at-risk students
(2) To bring closure to workshop
(3) To give participants the opportunity to evaluate the training

TOTAL TIME: 1 contact hour

ACTIVITIES:
A. General Program Characteristics
B. Closure
C. Evaluation

EQUIPMENT: Overhead projector and screen

MATERIALS:
Background information
Newsprint
Markers
Masking tape
Transparencies as indicated
Handouts as indicated
Evaluations as indicated

ACTIVITY A: GENERAL PROGRAM CHARACTERISTICS

OBJECTIVE: (1) To become familiar with the research on general program characteristics of quality programs for at-risk students
(2) To explore methods for implementing successful programs in specific school districts

TIME: 30 minutes

EQUIPMENT: Overhead projector and screen

MATERIALS: Background information
Transparencies III.A: 1, 2, & 3
Handout III.A: 1
Flip chart or newsprint

PROCESS:

1. Explain that we have explored specific instructional techniques supported by research for the at-risk student. Now we will turn our attention to general program characteristics that research indicates are indicators of quality programs. Stress that some of the research has been done in the regular classroom, but can be generalized to Extended School Services. A few of the characteristics may be applicable only to the classroom.
2. Using Transparencies III.A: 1, 2, & 3 as visual aids, present the content from the background information.
3. Ask the participants to break into groups of three or four. Remind the groups to appoint a facilitator/recorder who will later report the group's findings to the large group. Ask each group to complete Handout III.A: 1. Allow approximately 15 minutes for small group work.
4. As a large group, review each group's findings and on the flip chart list the steps to implement.

GENERAL CHARACTERISTICS OF SUCCESSFUL PROGRAMS

* Clear goals and objectives which have high expectations for student learning and behavior
* Coordination with regular school programs
* Parent and community involvement
* Appropriate instructional materials, methods, and approaches
* Close monitoring of student progress along with regular feedback
* Recognition and rewards for excellence
* Use of evaluation results for program improvement

METHODOLOGIES FOR IMPLEMENTATION OF SUCCESSFUL PROGRAMS

* Establish a policy that commits the schools to helping all children learn.

* Examine the needs of the community for supporting students, such as child care, health services, etc.

* Develop a demographic profile of the school system to determine who and how many might be at-risk.

* Develop a definition of at-risk that is pertinent for each school population. Include characteristics such as absenteeism, chemical dependency, poor grades, low test scores, limited extracurricular participation, lack of identification with school, disruptive behavior, boredom with school, rebellious attitudes, verbal and language deficiencies, learning disabilities, pregnancy, poverty, and family mobility.

* Track identified students in terms of progress and use of the program.

* Constantly evaluate the implementation strategies of the program.

* Encourage flexibility in helping students at-risk.

* Involve parents in the children's schooling.

* Work with local businesses and social service agencies for support.

METHODOLOGIES FOR IMPLEMENTATION WITH PROGRAMS FOR YOUTH

* Small class size and tutoring (and small groups while tutoring)
* Appropriate instructional style (as described earlier)
* Counseling programs (which work on self-esteem and behavior management)
* Alternative programs and settings
* Employment skills training
* Parent involvement
* Specially trained and empowered staff
* Flexible scheduling
* Help from the community
* Special services such as health clinics, job placement services, etc.

METHODS TO ASSIST IMPLEMENTATION OF SUCCESSFUL PROGRAMS FOR AT-RISK STUDENTS

Directions: Appoint a facilitator/recorder. Together decide on two methods from the list below (adapted from McCormick, 1989; and Stringfiled, Billig, & Davis, 1991) that each member of the group will try at his or her school. State very specific steps to initiate the two methods.

Methods

* Coordination with regular school program
* Close monitoring of student progress along with regular feedback
* Recognition and rewards for excellence
* Develop a demographic profile of the school system to determine who and how many might be at-risk
* Develop a definition of at-risk that is pertinent for each school population. Include characteristics such as absenteeism, chemical dependency, poor grades, low test scores, limited extracurricular participation, lack of identification with school, disruptive behavior, boredom with school, rebellious attitudes, verbal and language deficiencies, learning disabilities, pregnancy, poverty, and family mobility
* Track identified students in terms of progress and use of the program
* Work with local businesses and social service agencies for support
* Counseling programs (which work on self-esteem and behavior management)
* Employment skills training (applicable only to youth)
* Specially trained and empowered staff

Circle the two methods you will initiate at your school and describe the steps you will take to begin the initiative or method.

1.

2.

ACTIVITY B: CLOSURE

OBJECTIVES: (1) To highlight topics covered in the training
(2) To encourage implementation of knowledge

TIME: 15 minutes

EQUIPMENT: None

MATERIALS: Seven pieces of newsprint taped around room headed with one each of the following:

- One caution for a definition of at-risk
- One characteristic of an at-risk student
- One fallacy concerning at-risk students
- One belief, attitude, technique to overcome fallacies
- Descriptive words about successful instruction techniques
- One method of parent involvement
- One general characteristic of successful programs

PROCESS:

1. Ask participants to stand and stretch and to look around room at headings on newsprint. Explain that these headings summarize the workshop. Ask participants to choose three of the headings and write one thing they have learned under the appropriate heading. Stress one or two descriptive words are appropriate. Allow approximately 10 minutes.
2. Ask for volunteers to read each of the topics to summarize.
3. Relate your enjoyment of the training and your individualized closure.

ACTIVITY C: EVALUATION

OBJECTIVE: To allow participants the opportunity to evaluate the training

TIME: 15 minutes

EQUIPMENT: None

MATERIALS: Evaluation form

PROCESS:

1. Ask participants to complete the evaluation form and place in a designated spot as they leave.

Activity III.C: Evaluation Form

EVALUATION

Title of Workshop: _____

Date of Workshop: _____

Presenter(s): _____

1. Please rate the trainer(s) according to his/her performance on the following scale. ***(circle number)***

a. Content relevance

Not relevant				Very relevant
1	2	3	4	5

b. Effectiveness of presenter

Not very effective				Very effective
1	2	3	4	5

2. Please indicate your personal reactions to the workshop.

	Yes	To Some Extent	No
The workshop lived up to my expectations.	___	_____	___
I would recommend this workshop to others.	___	_____	___
I anticipate this workshop will assist me on my job.	___	_____	___

3. Please make general comments about the workshop.

What did you like best about the workshop? _____

_____

_____

What did you like least about the workshop? _____

_____

_____

Other comments _____

_____

_____

REFERENCES

Alderman, M.K. (1990). Motivation for at-risk students. Educational Leadership, 48(1), 27-30.

Baldwin, B.A. (1989). The cornucopia kids. US Air Magazine, 11(10), 30-34.

Canfield, J. (1990). Improving students' self-esteem. Educational Leadership, 48(1), 48-50.

French, D. & Rothman, S. (1990). Structuring schools for student success: A focus on ability grouping. Quincy, MA: Massachusetts State Department of Education, Bureau of Research, Planning, and Evaluation. (ERIC Document reproduction Service No. ED 315 501)

Clifford, M.M. (1990). Students need challenge, not easy success. Educational Leadership. 48(1), 22-26.

Galen, H. (1991) Increasing parental involvement in elementary school. Young Children. January 1991.

Gage, N. L. (1990). Dealing with the dropout problem. Kappan. 72(4), 280-285.

Griswold, P.A. (1986). Computer assisted instruction: More than just drill. Rural Educator 7(2), 15-16.

Hornbeck, D.W. (1990). Technology and students at risk of school failure. Elmhurst, IL: North Central Regional Educational Lab. (ERIC Reproduction Service No. Ed 327 175)

Hrncir, E.J. & Eisenhart, C.E. (1991). Use with caution: The "at-risk" label. Young Children. 46(2), 23-27.

Knapp, M.S., Turnbull, B.J. & Shields, P.M. (1990). New Directions for Educating the children of poverty. Educational Leadership. 48(1), 4-8.

Knapp, M.S., Adelman, N., Needels, M., Zucker, A., McCollum, H., Turnbull, B., Marder, C., & Shields, P. (1991). What is taught, and how, to the children of poverty. Interim Report form a Two-Year Investigation (Contract No. LC88054001). Washington: U.S. Department of Education. (ERIC Document Reproduction Service No. ED 336 491)

Lareau. A. (1987). Social class differences in family-school relationships: The importance of cultural capital. Sociology of Education, 60, 73-85.

McCormick, K. (1989). An equal chance: Educating at-risk children to succeed. Alexandria, VA: National School Boards Association.

NASBE (1988) Right from the start. The Report of the NASBE Task Force on Early Childhood Education. Alexandria, VA: Author.

Nechworth, J., Cisneros, E., & Sanchez, K. (1990). Chapter I: Extended day on-campus/off campus program. Houston TX: Dept. of Research and Evaluation. (ERIC Reproduction Service No. ED 318 838)

Schorr, L.B. (1989). Within our reach. New York: Doubleday.

Slavin, R.E. (1989). School and classroom organization. Hillsdale, NJ: Erlbaum.

Sternberb, R.J., Okagaki L., & Jackson, A. (1990) Practical intelligence for success in school. Educational Leadership 48(1), 35-39.

Stringfield, S., Billig, S.H., & Davis, A. (1991). Implementing a research-based model of Chapter 1 program improvement. Kappan, 72(8), 600-606.

Swan, K., Mitrano, M., Guerrero, F., & Cheung, M.(1990). Perceived locus of control and computer-based instruction. (Paper presented at the Annual Meeting of the American Educational Research Association). Boston, MA: author. (ERIC Document Reproduction Service No. ED 327 140)

Thornburg, K.R., Hoffman, S., & Remeika, C. (1991). Youth at risk: Society at risk. The Elementary School Journal, 91(3), 199-207.

Vanfosse, B.E. Jones, J.D., & Spade, J.Z. (1987). Curriculum tracking and status maintenance. Sociology of Education, 60, 104-122.

READINGS

MICHAEL S. KNAPP, BRENDA J. TURNBULL, AND PATRICK M. SHIELDS

Reading #1

New Directions for Educating the Children of Poverty

Disadvantaged children are capable of much more than we typically require of them. If they are to fulfill their potential, we must adopt practices that reflect this higher expectation.

More than one in five schoolchildren in the United States come from families in poverty.[1] For educators, policymakers, researchers, and the public, improving these children's schooling is an increasingly urgent concern. Despite extra resources from the federal government and despite recent educational reforms, the children of poverty experience failure disproportionately in their early school years, and they often leave school ill-equipped for adult life.

The predicament of these disadvantaged children is not new. Over the past few decades, scholars and practitioners have invested considerable energy in the search for effective ways of educating such children at the elementary school level. From their efforts, a set of principles and prescriptions has evolved into the conventional wisdom about educating the children of poverty. Stated oversimply, the conventional wisdom focuses on the deficits of disadvantaged learners and sets forth solutions in the form of principles of curriculum organization, instructional approach, classroom management, and instructional grouping.

We do not suggest that this way of thinking must be discarded, although some researchers advocate doing so.[2] Applied skillfully, it may result in good student performance on standardized tests, especially the tests administered in the elementary grades, which emphasize basic skills. However, new evidence and recent analysis call into question many of the tenets of this conventional wisdom. Further, this approach may place an unintended ceiling on the learning of disadvantaged students.[3] Our purpose here is to summarize the shortcomings of the conventional wisdom and to suggest alternative approaches for both regular classroom instruction and supplemental programs.

The children of poverty experience failure disproportionately in their early school years, and they often leave school ill-equipped for adult life.

The Conception of the Disadvantaged Learner

Conventional wisdom. A great deal of research and practice has been predicated on the assumptions that disadvantaged students are deficient in their preparation for school and that their families have given them a bad start in life.[4] These assumptions, in effect, locate the problem in the learner and his or her background.

A critique. These conventional assumptions can be criticized on two general grounds. First, stereotypical ideas about the capabilities of a child who is poor or who belongs to an ethnic minority will detract from an accurate assessment of the child's real educational problems and potential

Second, by focusing on family deficiencies, educators may miss the strengths of the cultures from which many disadvantaged students come. The adverse consequences of these conceptions include (1) low expectations for what these students can accomplish in academic work; (2) failure to examine carefully what the schools do that exacerbates (or facilitates the solution of) these learning problems; and (3) misdiagnosis of the learning problems these students face (e.g., interpreting dialect speech patterns as decoding errors).

An alternative view. The disadvantaged child may well bring to school speech patterns, cognitive predispositions, and behavior patterns that do not match the way things are done in school. These students must learn the culture of the school while they are also attempting to master academic tasks. While recognizing that there *may* be gaps in disadvantaged students' experience, the educator builds on their experience bases and at the same time challenges the children to expand their repertoires of experiences and skills. This perspective gains support from a decade or more of cognitive research and related theories of learning that portray the learner as an active constructor of knowledge and meaning rather than a passive recipient of information and skills.

The alternative to the common practice suggests that disadvantaged students are better able to meet the academic challenges of school when:

- teachers respect the students' cultural/linguistic backgrounds and communicate this appreciation to them in a personal way;
- the academic program encourages students to draw and build on the experiences they have, at the same time that it exposes them to unfamiliar experiences and ways of thinking;
- the assumptions, expectations, and ways of doing things in school—in short, its culture—are made explicit to these students by teachers who explain and model these dimensions of academic learning.[5]

Sequencing and Challenge in the Curriculum

Conventional wisdom. Conventional curriculums, especially for disadvantaged students, are characterized by two basic traits.[6] First, they break up reading, writing, and mathematics into fixed sequences of discrete skills, ordered from the simplest (the basics) to the more complex (higher-order skills). Second, instruction typically emphasizes mastery of these skills by linear progression through the sequence. Children who haven't mastered spelling, for example, are considered not ready to write stories. Or, in mathematics lessons, practical problems involving multiplication are not introduced until the students can do paper-and-pencil multiplication problems, to say nothing of knowing their multiplication tables. Such rigid sequencing appears in curriculums at all elementary grade levels.

From one point of view, this way of building curriculums makes good sense. With basic skills isolated, teachers can identify and teach those assumed to be deficient in the student's repertoire, provide a clear structure for learning, facilitate the charting of students' progress, and have a common vocabulary for diagnosing what low-achieving students need.

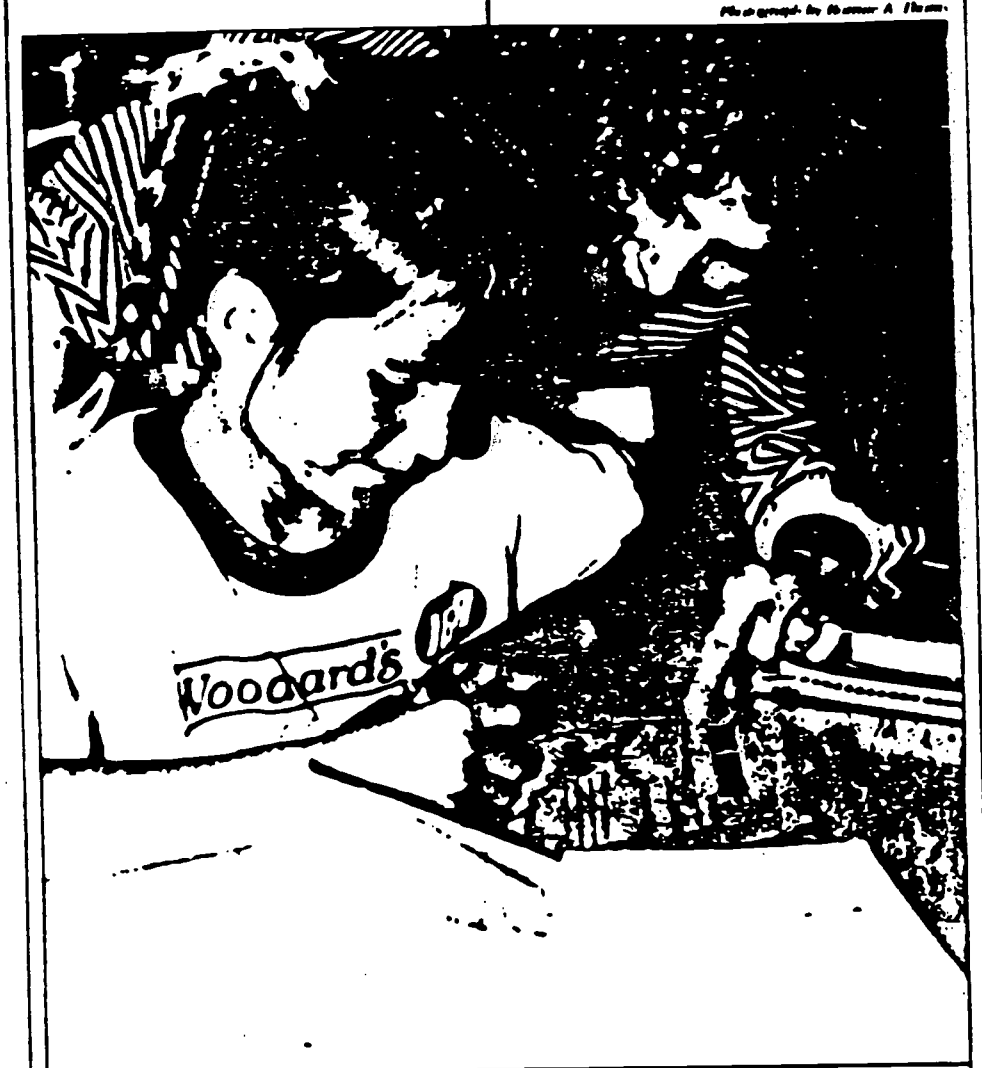
A critique. Despite these advantages, however, there is broad agreement among experts in mathematics and literacy that such curricular assumptions and structures are critically limited in several important respects.[7] They often (1) underestimate students' capabilities; (2) postpone more challenging and interesting work for too long, in some cases forever; (3) fail to provide a context for learning or for meaningfully using the skills that are taught; and (4) even reinforce academic failure over the long term. The students are literally charged with putting the pieces together into an integrated and useful base of knowledge and, more often than not, they don't. In the view of many experts, this approach to curriculum lacks both coherence and intellectual challenge for the students who experience it.

An alternative. The available evidence suggests that effective curriculums should:

- focus on meaning and understanding from the beginning—for example, by orienting instruction toward comprehending reading passages, communicating important ideas in written text, or understanding the concepts underlying number facts;
- balance routine skill learning with novel and complex tasks from the earliest stages of learning;
- provide a context for skill learning that establishes clear reasons for needing to learn the skills, affords opportunities to apply the skills, and helps students relate one skill to another;
- influence attitudes and beliefs about the academic content areas, as well as skills and knowledge;
- eliminate unnecessary redundancy in the curriculum (e.g., repeated instruction in the same mathematics computation skills year after year).[8]

The Role of the Teacher in Instruction

Conventional wisdom. Since the mid-1970s, the instruction of disadvantaged students has been dominated by a category of teaching approaches known as direct instruction.[9] Although there are variations among them, these approaches typically feature (1) teacher-controlled instruction, with considerable time spent presenting lesson material and directly supervising students' work; (2) extensive opportunities for practice and frequent corrective feedback; (3) careful structuring of academic tasks so that content can be introduced in small, manageable steps; (4) rapid pacing; and (5) whole-group or homogeneous-group formats. Logically, this class of approaches lends itself particularly well to the linear, discrete skills-oriented curriculums discussed earlier. And the research evidence indicates that, for disadvantaged populations, direct instruction does enhance some kinds of academic learning, in particular, those involving discrete basic skills.[10]



By teaching the cognitive processes that underlie a skill, this teacher lays the groundwork for her student to become a more responsible learner.

A critique There is growing dissatisfaction, however, about the ability of direct instruction to convey more integrated and challenging curriculums to students. First, students do not learn to think for themselves when the teacher breaks the learning task into small, manageable steps and explains how to accomplish each step. Second, some important academic learning goals don't lend themselves to small, manageable steps. Third, students can easily become dependent on the teacher to monitor, motivate, and structure all aspects of the work they do.

An alternative. In this area, current research does not support abandoning the central role of the teacher but instead suggests balancing it with different approaches. A balance of teacher-directed and learner-directed instruction, for example, has much to offer disadvantaged students, especially if the goal is to engage students in activities that are intellectually challenging.[11] The key is to strike the right balance between teacher direction and student responsibility, so that students understand what they are doing (and why) and that, over time, their capacity for self-regulated learning increases. To achieve an appropriate balance, teachers should

- teach explicitly the underlying thinking processes along with skills—for example, by modeling the cognitive process involved when interpreting a story problem in mathematics or trying to understand the author's point of view in a piece of literature;
- encourage students to use each other as learning resources and structure their interaction accordingly, as in many cooperative or team learning arrangements;
- and, as students become more accustomed to constructing knowledge and applying strategies on their own, gradually turn over responsibility for their learning to them, within sequences or units of instruction and across the school year.[12]

Effective curriculums balance routine skill learning with appropriate novel and complex tasks from the earliest stages of learning.

The Relationship of Classroom Management to Academic Work

Conventional wisdom. The conventional wisdom holds that a uniform structure provides students with clear expectations and guidance regarding interactions with teachers and other students. While all classrooms present teachers with the problem of establishing and maintaining order, those that serve large numbers of disadvantaged students confront teachers forcefully with management problems as the year begins, inviting solutions that impose a uniform—sometimes rigid—structure.

To an extent, well-established principles of classroom management have been developed that support this view.[13] These principles combine good prevention, chiefly through

tone-setting and the development of routines early in the year, with appropriate remediation as disruptive behavior occurs.

A critique. However, this way of thinking about classroom management omits a critical element: the relationship between classroom management and the actual academic work that goes on in the room.[14] This relationship is not necessarily problematic or complex when the work itself is routine and oriented toward basic skills instruction. But when more challenging curriculums are introduced, this approach can become unsatisfactory. Conversely, lack of challenge in the curriculum can contribute to classroom disruption, as students get into trouble out of boredom. Project learning in mathematics, for example, may involve simultaneous student groups engaged in projects that, together, increase the level of noise and activity in a room beyond what teachers and principals have come to expect.

An alternative. A better perspective on classroom management retains two elements of the conventional wisdom (1) the teacher establishes general ground rules at the beginning of the school year, and (2) the teacher maintains order over time through vigilant monitoring and ongoing problem solving, as he or she anticipates challenges to, or distractions from, learning in the classroom. But this perspective also encourages teachers to find a new basis for order that emanates as much as possible from academics rather than generic rules, incentives, and consequences for misbehavior. In general, then, classroom management should be intimately linked to the nature of the academic work being done. From this perspective, teachers can most effectively manage behavior if they:

- plan a strong "program of action," rooted in interesting and engaging academic activities;
- set expectations for classroom order that are appropriate to the academic work at hand, within broad boundaries established for overall behavior in the room. (Students need to be taught explicitly that noise levels, the degree of movement around the classroom, and so on, can vary, and under what circumstances);
- encourage students who initially may resist novel and unfamiliar work that accompanies a more challenging curriculum.[15]

The key is to strike the right balance between teacher direction and learner responsibility so that, over time, students' capacity for self-regulated learning increases.

Accommodating Differences in Student Proficiency

Conventional wisdom. Several common arrangements for instructing diverse groups place low-achieving children together and separate them from those who do better. Three are especially pervasive: (1) ability-based reading groups in the primary grades; (2) formal or informal tracking in literacy and mathematics instruction in the upper elementary grades; and (3) group-based supplemental services (e.g., Chapter 1 pullout instruction) in both literacy and mathematics. These arrangements appear to solve a fundamental instructional problem—that of matching students with appropriate learning tasks.

A critique. These differentiated arrangements, however, may create or exacerbate other problems.[16] Most important, low-achieving students often become permanently segregated in these groupings or tracks. To make matters worse, determinations of "low achievement" are not necessarily reliable. Misdiagnoses of students' academic abilities happen all too often when ethnic or linguistic features (e.g., dialect speech or limited-English-proficiency) are interpreted as signs of low ability. In addition, some of these arrangements create groupings of convenience—for example, four to six poor readers in a Chapter 1 reading room drawn from two or three different classrooms—that may not be particularly effective from the students' point of view. Furthermore, segregation in lower-track groups carries a stigma that may lead to certain students' being labeled "dummies," not to mention the more limited curriculums that are sometimes offered such groups.

Still, the research evidence on the efficacy of ability-grouped learning arrangements for low achievers is mixed.[17] Some reviews find positive effects, while others find harmful or inconclusive influences of such arrangements on academic outcomes.

An alternative. Research evidence does not warrant doing away with ability-based differentiation altogether.[18] However, schools should consider:

- using (1) heterogeneous grouping, such as cooperative and team learning, and (2) more flexible and temporary ability-grouped arrangements;
- integrating supplementary assistance, such as Chapter 1 instruction, as much as possible into mainstream classroom activities and/or providing supplementary instruction at times when students do not need to be away from their main classrooms;
- maximizing individual help to low-achieving students on an ad hoc basis rather than in long-term group-based arrangements.

Putting New Ideas into Practice

The preceding discussion suggests alternative conceptions of the learner, the curriculum, and instructional practice that apply across all subject areas in elementary schools. Guiding these conceptions is a conviction that disadvantaged students are capable of much more than is typically expected of them and that schools can organize themselves to demand high academic performance from these students.[19]

Schools should maximize individual help to low-achieving students on an ad hoc basis rather than in long-term group-based arrangements.

There is evidence on which to base this conviction—ranging from advances in understanding of student cognition to dramatic demonstrations of results such as the performance of inner-city youths on advanced-placement calculus tests.[20]

It would be a mistake to take the principles we have presented as new received wisdom about the education of disadvantaged children. These ideas are not a blueprint for change but a call for further experimentation by practitioners and scholars alike, who, as they try these out, will evolve better principles, in addition to discovering altogether different ones. There is much still to be learned about ways to apply them to particular grade levels, mixtures of students, and school settings. We hope that the ideas presented here will lead to the curriculums that disadvantaged students need to participate fully in a complex technological society. □

Authors' note about endnotes Because the argument in this article relies heavily on the commissioned papers and literature review chapters contained in *Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom—Volume II Commissioned Papers and Literature Review* (M.S. Knapp and P.M. Shields, eds., January 1990, Menlo Park, Calif.: SRI International), we refer below simply to the paper or literature review author and "Volume II" to avoid unnecessary repetition in referencing.

[1]H. Hodgkinson, (June 1985). *All One System: Demographics of Education, Kindergarten through Graduate School* (Washington, D.C.: Institute for Educational Leadership).

[2]For example, see L. Moll's paper, Volume II.

[3]See W. Doyle's paper, Volume II.

[4]See J. Brophy's paper, Volume II, which makes useful distinctions among common conceptions of the "deficits" many poor children bring to school.

[5]See papers by B. Neufeld and L. Moll, Volume II, which summarize evidence related to these principles; see also J. Comer, (1988). "Educating Poor Minority Children." *Scientific American* 259, 5: 42–48.

[6]See W. Doyle's paper, Volume II, for an analysis of conventional approaches to organizing curriculum.

[7]See papers by A. Porter, R. Allington, and J. Brophy, Volume II.

[8]Papers in Volume II review existing evidence regarding the efficacy and desirability of balancing basic skills learning with more challenging curriculums. For example, see papers by A. Porter and C. McKnight regarding mathematics curriculums, by D. Pearson and G. Garcia regarding reading curriculums.

[9]By "direct instruction," we mean instructional approaches that emulate the model of the same name that was part of the Follow Through Planned Variation Experiment in the early 1970s. We distinguish direct instruction from what has been described more generically as "active teaching"—that is, instruction in which students spend most of their time being taught or supervised by their teachers rather than working on their own (or emphasize direct teacher control of learning activities in the classroom). However, unlike direct instruction, active teaching does not presuppose any particular type of academic task, pacing, or grouping.

[10]For a review of this evidence, see H. McCollum's paper, Volume II.

[11]Clear examples can be found in the teaching of reading, for example, the work of Palincsar and Brown with "reciprocal teaching"; see paper by D. Pearson and G. Garcia for a review of this and related work.

[12]See papers by D. Pearson and G. Garcia, and J. Brophy, Volume II; see also work by R. Slavin and others on the efficacy of cooperative learning arrangements, as discussed in H. McCollum's review, Volume II.

[13]J. Brophy, (1986). "Research Linking Teacher Behavior to Student Achievement: Potential Implications for Chapter 1 Students," in *Designs for Compensatory Education Conference Proceedings and Papers*, edited by B.I. Williams et al. (Washington, D.C.: Research and Evaluation Associates).

[14]See W. Doyle's paper, Volume II.

[15]The basis for these principles is best described in W. Doyle's paper and also in H. McCollum's review, Volume II.

[16]See H. McCollum's review, Volume II.

[17]Consider evidence from research syntheses by Slavin, Hallinan, Persell, and Wilkinson, reviewed in H. McCollum's paper, Volume II.

[18]See, for example, R. Slavin, (1986). *Ability Grouping and Student Achievement in Elementary Schools: A Best Evidence Synthesis* (Baltimore, Md.: Center for Research on Elementary and Middle Schools, Johns Hopkins University).

[19]The point is persuasively argued by R. Calfee, (1986). "Curriculum and Instruction in Reading," in *Designs for Compensatory Education Conference Proceedings and Papers*, edited by B. I. Williams et al. (Washington, D.C.: Research and Evaluation Associates).

[20]J. Mathews, (1988). *Escalante: The Best Teacher in America* (New York: Holt, Rinehart).

Authors' note This paper is a condensed version of the first report (summary volume) to emerge from the Study of Academic Instruction for Disadvantaged Students. The summary volume, entitled *Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom*, synthesizes ideas contained in a companion volume (see endnotes). We wish to acknowledge the contributions of other study team members and scholars who wrote commissioned papers and literature review chapters in the companion volume: R. Allington, J. Brophy, W. Doyle, G. Garcia, H. McCollum, C. McKnight, L. Moll, M. Needels, B. Neufeld, D. Pearson, A. Porter, W. Secada, and A. Zucker.

Michael S. Knapp is Manager, Education Policy Studies, SRI International, 333 Ravenswood Ave., Menlo Park, CA 94025. **Brenda J. Turnbull** is Principal, Policy Studies Associates, 1718 Connecticut Ave., N.W., Washington, DC 20009. **Patrick M. Shields** is Education Policy Analyst, SRI International.

Study of Academic Instruction for Disadvantaged Students

WHAT IS TAUGHT, AND HOW, TO THE CHILDREN OF POVERTY

Interim Report from a Two-Year Investigation

March 1991

Prepared by:

Michael S. Knapp
Nancy E. Adelman
Margaret C. Needels
Andrew A. Zucker
Heather McCollum
Brenda J. Turnbull
Camille Marder
Patrick M. Shields

The conduct of this study and the preparation of this report were sponsored by the U.S. Department of Education, Office of Planning, Budget and Evaluation, under Contract No. LC88054001. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the U.S. Department of Education.

EXECUTIVE SUMMARY

Recent research and a growing body of evidence from demonstration programs suggests that a more academically challenging learning experience can be offered the students at greatest risk of academic failure--those from low-income backgrounds, who disproportionately represent ethnic and linguistic minorities. In the typical elementary school, however, these students encounter instruction that is often repetitive, uninspiring, and limited to the "basics."

Current practice reflects, in part, a widely accepted "conventional wisdom" about the best ways to teach in such settings.* These approaches emphasize curricula that proceed from the "basics" to advanced skills, instruction that is tightly controlled by the teacher, and ability grouping that often becomes permanent tracks at an early age. While these approaches may improve children's grasp of basic skills, they appear to shortchange learning of more advanced skills in reasoning, comprehension, and composition.

A major federal study of mathematics and literacy instruction in schools that serve the children of poverty is currently under way in search of more effective practice. The study is addressing three questions:

(1) What departures from conventional wisdom are being tried in schools serving the children of poverty?

(2) Which of these approaches show promise, either in their own right or in combination with more traditional approaches, for boosting students' mastery of advanced and basic skills?

(3) What combination of factors in the school, district, and state supports the introduction of promising instructional approaches?

The Interim Report

This report, the second to emerge from the study, provides preliminary answers to these questions, by describing current practices in first, third, and fifth grade classrooms in fifteen elementary schools that serve large numbers of children from low-income families. The interim report presents descriptive results from the first of two years of data collection; it does not include an analysis of outcomes. The third and final report (to be completed in the fall of 1991) will provide a more complete analysis of all study data sources, including outcomes of instruction.

---

* Conventional and alternative approaches are described in the first of the Academic Instruction Study reports, Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom.

Themes from the First Year Findings

Major themes from the first year of investigation are as follows:

- Many teachers in the sample schools are engaged in modest, incremental departures from conventional assumptions about mathematics, reading, and writing instruction.
- A small number have made, or are attempting, more fundamental shifts in practice.
- State and district requirements and support systems at the school and district level appear to play critical roles in enabling or inhibiting teachers' adoption of instructional alternatives.

These themes emerge from analyses of instructional practices in the regular classroom, the role of supplemental instruction, and influences on the classroom practice.

Instructional Practices in the Regular Classroom

The first year of the study focused on identifying the range of approaches to mathematics, reading, and writing instruction in the regular classroom, with special attention to those features of instruction most likely to influence the acquisition of skills in mathematical reasoning, reading comprehension, and written composition. In addition, the study focused on aspects of instructional strategy and management that apply more generically to all subject areas.

Classroom Management and the Academic Learning Environment

Cutting across all subject areas are basic patterns of classroom management deriving from a variety of sources, such as the characteristics of the children themselves, the teachers' preferred style of interaction with them, and the teachers' ability to establish and maintain their conception of classroom order. The prevailing management pattern does not, by itself, determine academic outcomes, but it has much to do with the academic learning environment in the classroom. Four distinct environments are found in the study sample:

- Dysfunctional environments. Although generally excluded in the sampling process, some classrooms are preoccupied with unresolved problems of order; little academic work takes place in such settings.
- Adequate environments. In these classrooms, the problem of order is partially resolved and academic work is taking place, but the struggle between teacher and students over control continues.
- Orderly restrictive environments. Here, the great majority of students' time and energy is devoted to academic work, with little or no overt challenge to established classroom order. However, order is achieved through tight control that limits the range of instructional approaches and academic work in which students are able to engage.

- Orderly enabling environments. Students spend nearly all their time doing academic work with minimal disruption; teachers establish this kind of environment without restrictive controls and in a fashion that enables a wide range of activities and instructional approaches to be undertaken.

The full implications of these environments for student learning have yet to be demonstrated (it is possible, for example, that some students perform better in orderly, restrictive environments than in orderly, enabling environments).

A Dysfunctional Learning Environment

The students of various racial backgrounds in this fifth-grade classroom appear to like the teacher, but there is a constant tug-of-war between the teacher and students over discipline. The teacher is quite stern with the students, yet she often allows them to socialize: They take advantage of every opportunity to interact with each other--whispering, calling out, passing notes, moving around. In cyclical fashion, the noise level slowly rises beyond what the teacher will tolerate. She then angrily warns the class to quiet down and eventually hands out individual punishments or makes everyone "write lines"--that is, fill several sheets of paper with a disciplinary sentence or the school's mission statement. Things quiet down for a while, and the cycle begins again. Although they often seem eager to engage in learning activities, the students generally succeed in avoiding academic tasks entirely, especially when it involves seatwork.

An Orderly Enabling Learning Environment

In a word, this teacher's first-grade class in a rural area "hums." It is a comfortable place where the children, half Hispanic and half Anglo, enjoy being there and doing schoolwork; the business of learning is central to everything that is done in the room. Children treat each other and the teacher with respect, as a result of her careful lessons in how to listen to each other, to offer ideas verbally to the class, and to respect what others say. The teacher's management style is calm and quiet. She is remarkably effective at maintaining order despite the fact that the classroom is one of four clustered together in a semi-open pod arrangement. She uses a combination of quiet reminders and individual praise for So-and-So, who is sitting nicely now. The result is the students do what she asks the first time she asks, with rare exceptions (which are quickly brought into line), and attention is not drawn to management issues very often. The children devote nearly all of their energy to academic tasks and other aspects of the school's curriculum.

Although in one sense independent of what is taught in the three subject areas, the management pattern associated with each type of environment represents decisions (conscious or otherwise) about the kind of mathematics, reading, or writing in which students will be engaged.

Mathematics Instruction

On the whole, mathematics instruction in the sample classrooms conforms to trends that are prevalent across the country. Arithmetic computation is the overriding goal of instruction in many classrooms from first through fifth grades; instruction typically emphasizes teacher presentation followed by written seatwork. The curriculum is often defined by the textbook.

Nonetheless, classrooms do vary on dimensions that reflect two strategies for maximizing mathematical understanding and reasoning. The first strategy emphasizes conceptual understanding and skill building; the second strategy broadens the array of mathematical topics beyond arithmetic. Based on the presence or absence of the e strategies, classroom instruction tends to exhibit one of the following four goal orientations:

- Focus on arithmetic with skill building as the primary goal.
- Focus on arithmetic with the goal of building conceptual understanding along with skills.
- Focus on multiple topics, with a "skills only" orientation.
- Focus on multiple topics with equal (sometimes greater) attention to conceptual understanding (see example below).

Mathematics in a Third-Grade Classroom

The teacher appears to be doing an excellent job of implementing the relatively new state framework for mathematics education in a diverse inner-city third-grade classroom. While she emphasizes arithmetic computation skills throughout the year, she also integrates instructional material relating to geometry, measurement, problem solving, logical reasoning, statistics and probability, and patterns and sequence. The teacher uses manipulatives to help teach concepts. Cooperative learning groups are often used in her class, and in fact about one-third of the class time is in some sense "student-directed," which is exceptionally rare. The teacher consistently makes connections between one mathematics concept and another, thereby helping to present mathematics as a unified discipline, not just a set of different skills.

Each successive goal orientation represents an increasing departure from conventional assumptions about mathematics teaching; classrooms in the fourth group come close to the goals of reformers in mathematics, e.g., as expressed in the National Council of Teachers of Mathematics' Curriculum and Evaluation Standards for School Mathematics.

Various features of mathematics instruction differ systematically depending on the goal orientation teachers adopt. Those teaching multiple mathematical topics, for example, tend to spend more time per day on mathematics than those who concentrate on arithmetic alone. In classrooms in which conceptual understanding is emphasized, students use manipulatives more often. Teachers who concentrate on arithmetic skills tend to rely more heavily on the textbook than teachers who pursue a more wide-ranging curriculum.

Reading Instruction

The variation in approaches to reading instruction across the sample classrooms is not as neatly categorized as in mathematics, and the differences across grades are more pronounced. Nonetheless, there are common patterns, both across and within grades. Basal readers form the core of reading material in most classrooms, especially in the lower grades; in the great majority of these cases the basals take the form of "literary" readers, which principally contain excerpts from children's literature. Nearly all teachers spend a substantial portion of their time on teaching discrete reading skills. Homogeneous grouping by ability is prevalent (though not universal), especially in first grade. Thus, few classrooms exhibit approaches to reading, or literacy as a whole, that reflect radical alternatives to established practice, such as those advocated by proponents of "whole language" teaching (although elements of whole language approaches influence many teachers' work).

Nonetheless, important differences in approach can be discerned. Parallel to their use of strategies aimed at mathematical reasoning, teachers make varying use of the following strategies aimed at maximizing reading for understanding:

- Maximizing the opportunities to read whole text, both orally and silently.
- Integrating reading and writing instruction.
- Focusing on comprehension and interpretation of what is read, especially through explicit teaching of strategies for comprehending text.
- Deemphasizing the teaching of discrete skills in isolation from text.
- Providing opportunities to discuss what is read and extend knowledge gained from reading.

These strategies are combined (or ignored) in a variety of ways that do not yield a simple typology, as in the case of mathematics. In promising cases, classrooms display several strategies at once (see inset example below).

Reading in a Fifth-Grade Classroom

In a multiracial fifth-grade classroom, the teacher has shifted from basal readers to a literature-based curriculum designed by her and a colleague. During reading instruction, she pushes her students not only to expand their vocabularies and knowledge of the world but also their ability to interpret what they read. For example, while reading two stories that center on the experiences of Black Americans during the Revolutionary War, the class is assigned to write about fairness in the story. Later, the students share the results of their efforts with each other. As the teacher guides the students in the presentation of their thoughts to peers, she teaches them how to compliment and support each other in a group setting. As the children read what they have written, the teacher finds something encouraging to say toeach before offering constructive criticism and suggestions for expansion or rewriting. This teacher finds that having students write about what they have read facilitates comprehension. In addition, she reads aloud to her class extensively and regularly and types and distributes song lyrics as a music-related activity.

Writing Instruction

As is the case nationwide, sample classrooms exhibit a wide range of approaches to writing instruction, from those in which virtually no writing takes place to those with extensive and varied opportunities for writing composed text. Instruction in at least some elements of the writing process is widespread. When they do compose actual text, students are most likely to engage in "personal" writing (typically in journals, which are found in most of the sample classrooms). A fair amount of imaginative and informative writing is also done; persuasive or analytic writing, however, is the exception rather than the rule. Language-mechanics skills, such as spelling, handwriting, punctuation, and grammar, are widely taught, although teachers differ in the manner in which they teach these skills.

The amount of composed text writing provides a clue to other features of writing instruction, in particular a series of strategies that teachers adopt to maximize meaningful written communication, many of which parallel those described above for reading. Classrooms with large amounts of composed writing also tend to exhibit most of the following strategies (see inset example below):

- Integrating writing with other areas of the curriculum.
- Emphasizing meaningful communication as the goal of writing and simultaneously deemphasizing language-mechanics skills and correctness.
- Teaching the process of writing.
- Constructing a social context for writing that motivates students and encourages communication with others (e.g., by permitting peer interaction while writing and allowing students more room to determine the content and form of their written expression).

Writing in a First-Grade Classroom

A visit to this inner-city first-grade classroom at any time during the year reveals the importance given to written text. The walls of the classroom are filled with word lists, poems, the class daily newspaper, and stories dictated to the teacher early in the year and later written by the students themselves. Each morning, the the students dictate to the teacher five or six sentences that comprise that day's newspaper, which is posted throughout the day and taken home by a different student each day. In the early weeks of the school year, the students draw story pictures and label these pictures, using words from the lists displayed around the room. Later in the school year, the students write three- or four-sentence stories. Approximately 90 minutes of each morning is devoted to students dictating different kinds of text to the teacher and to reading these lists and stories. There is additional time for journal writing on a daily basis.

Supplemental Instructional Programs

Federal, state, and local programs or mandates support supplemental instructional services of various kinds in the schools under study--for example, the federal compensatory education program (Chapter 1), special education services of various kinds, and bilingual or English-as-a-Second-Language (ESL) programs for students with limited English proficiency. These programs play a potentially important role in the mathematics and literacy instruction available to students in the sample classrooms, especially for those who are less proficient in academic work. During the first year of the investigation, the study concentrated on identifying what supplemental staff bring to academic instruction and the instructional models employed by these services. The final report will address questions about what is actually taught to whom through such services.

Supplemental program staff bring both advantages and problems to their schools. On the one hand, they offer an "extra pair of hands" to teachers who face many demands, and in many cases they possess specialized skills in other subject areas. In addition, supplemental staff often increase the ethnic and cultural diversity of the instructional staff, which is especially appropriate to the often multicultural student population in the schools under study. At the same time supplemental staff bring complexity and a certain measure of unpredictability to the classroom teacher's already complicated life.

In the sample classrooms, supplemental program staff assist with instruction in three primary ways:

- Provide help with seatwork in the regular classroom.
- Enable the teacher to create special grouping arrangements.
- Offer specialized remedial instruction, in or out of the regular classroom.

Less frequently, supplemental instructional services take several other forms: As a source of advanced work for academically talented students; as a way of extending the school day or year (e.g., through after-school tutoring or extra instruction during vacation times); and as a vehicle for computer-based instruction (e.g., in those schools with computer labs).

Influences on Academic Instruction in the Classroom

Although there are innumerable subtle forces that affect the instruction teachers offer their students in the schools under study, several broad categories of influence appear to offer a partial explanation for the patterns of academic instruction across all subject areas.

First, the nature of the students in the classroom makes it more likely for certain management patterns or forms of instruction to appear. However,

the expected pattern appears less often than is typically assumed--that is, classrooms with higher pupil-teacher ratios, greater diversity, more low-income children, and greater student mobility are not necessarily the ones with unresolved management problems or less challenging instruction. In other words, teachers respond to the difficult challenges such classrooms pose in different ways, and not necessarily with a restricted range of curricula and learning opportunities.

Second, teachers' preparation, beliefs, and level of commitment are a major force in shaping what they do in the classroom. Teachers with more extensive subject-area preparation and professional development are more likely to experiment with alternatives to conventional skill-oriented instruction. Teachers' conceptions of the subject area and beliefs about how to teach it exert a similar influence on the kind of learning experience they offer students. In addition, teachers' personal commitment to their teaching leaves an unmistakable stamp on the degree to which they depart from traditional approaches to instruction.

Third, what teachers do in the classroom reflects factors in the school and district environment, among them:

- District and school curricular policies and how they are set, in particular, the extent to which the district prescribes what should be taught and how.
- Textbook choices, most clearly seen in the adoption of new language arts textbooks that embody different assumptions about literacy instruction.
- Testing and accountability pressures.
- District and school support--for example, through professional development opportunities, instructional guidance by the principal or other specialists, and the availability of appropriate resources.
- State (and sometimes district) frameworks or mandates that urge or require teachers to adopt (or refrain from) certain approaches to mathematics and literacy instruction.

These forces can act either as stimuli or constraints on what teachers do. Sorting out in greater detail the nature and extent of their influence on classroom practice is one of the tasks for the second year of the study.

What Has Been Learned and What Lies Ahead

Findings from the study's first year show a range of possibilities not widely assumed to be workable in classrooms serving the children of poverty. In particular, the patterns identified indicate numerous ways that instruction in such settings can focus more centrally on mathematical reasoning, reading comprehension, and written composition, even under the most trying circumstances. In addition, study findings point to key conditions and

actions that encourage (or discourage) attempts to redirect instruction along these lines.

It is important to remember that the findings are not a statement of what is typical in schools serving the children of poverty, nor do they represent the results of a planned demonstration or test of cutting-edge practices. Rather, they indicate what can be achieved by teachers in schools perceived to be doing an average to good job of educating low-income children.

There is much that remains for the second year of the investigation and for further analysis of all the data sets that have been gathered, which will be presented in the second year report (to be completed in the fall of 1991).

- For one thing, the relationship between patterns of instruction and academic learning outcomes has yet to be examined: Which approaches (or combinations thereof) produce the best results, in terms of both conventional and alternative measures of achievement?

- The investigation will also explore the implications of instruction for different segments of the student population: How well does instruction work for high versus low achievers, for participants in supplemental programs versus others, for majority versus minority students? What kinds of instructional practices work best with different kinds of children in these settings?

- In this regard, there is much more to be learned about supplemental instruction, in particular, what it teaches and its connections to what is taught in regular classrooms.

- Finally, the study will investigate further the nature of teachers' response to new visions of mathematics and literacy instruction and the manner in which they can best be supported in moving towards these instructional goals.

Reading #3

Improving Students' Self-Esteem

Using a 10-step system, teachers can help strengthen their students' self-esteem and increase their chances for success in life.

Teachers intuitively know that when kids feel better about themselves, they do better in school. The simple fact is, though, that youngsters today are not receiving enough positive, nurturing attention from adults, either at home or at school. The reasons are numerous and complex, but the result is that more and more students have low levels of self-esteem.

To raise the self-esteem of students, you must start with the school staff. The main way students learn is through modeling and imitation. If teachers have low self-esteem, they are likely to pass it on to their students. We must ensure, through preservice and inservice training, that teacher-student interactions are positive, validating, affirming, and encouraging.[1]

The challenge facing schools is great, but there are day-to-day things educators can do to increase children's self-esteem and, in so doing, improve their prospects for success (see "Does Self-Esteem Affect Achievement?"). I use a 10-step model to help students become winners in life.[2]

1. *Assume an attitude of 100 percent responsibility.* I introduce the following formula: E (events) + R (your response to them) = O (outcomes). When people don't get the outcomes they want, I urge them not to blame external events and other people but to take responsibility for changing *their* responses. For example, if I ask a class how many of them think it will raise Peter's self-esteem if I tell him he is the biggest idiot I ever met in my

Does Self-Esteem Affect Achievement?

Let's see what happens when a school makes a concerted effort in the area of self-esteem. One of the most detailed studies ever done was conducted by Gail Dusa (current president of the National Council for Self-Esteem) and her associates at Silver Creek High School in San Jose, California. (For more information, contact Gail Dusa, NCSE, 6641, Leyland Park Dr., San Jose, CA 95120.)

She divided the freshman class into three groups. The self-esteem group (93 students) was taught by teachers who adhered to three operating principles. They (1) treated all students with unconditional positive regard, (2) encouraged all students to be all they could be, and (3) encouraged all students to set and achieve goals. In addition, the group participated in a 40-minute activity to build self-esteem every second Friday throughout their freshman year. The control group (also 93 students) received no treatment but was monitored along with the self-esteem group for four years. The third group was not involved in the study. At the end of four years, Dusa's findings were as follows:

	Self-Esteem Group	*Control Group*
Days of absenteeism per semester	1	16
Percentage of students who completed 90 percent or more of their homework	75%	25%
Percentage of students who participated in 20 or more extracurricular activities	25%	2%
Percentage of class offices held by groups between freshman and senior years	75%	0
Percentage of students who graduated from high school	83%	50%

—Jack Canfield

We must ensure, through preservice and inservice training, that teacher-student interactions are positive, validating, affirming, and encouraging.

An important part of expanded self-esteem is the broadened awareness of one's strengths and resources.

whole life, very few of them will raise their hands. I then tell them that it is not what I say to Peter but what Peter says to *himself* afterward that ultimately affects his self-esteem. If Peter says, "Mr. Canfield has only known me for a few days, how did he find out so fast?", his self-esteem will probably go down. But if he says to himself, "Mr. Canfield just picked me out for his example because he knows I can take a little kidding," then his self-esteem will not be damaged.

I also emphasize that we are responsible for our behavioral responses. For example, hit someone who yells at you, and you go to the principal's office. Respond with humor or by ignoring the person, and you stay out of trouble. Surprisingly, most kids don't understand that they have choices, let alone what those different choices are.

2. *Focus on the positive.* In order to feel successful, you have to have experienced success. Many students, because they feel they have never done anything successful, need to be coached. Often this is because they equate "success" with, say, winning a medal or getting rich. I spend a lot of time having students recall, write about, draw, and share their past achievements. With some probing and discussion, students often identify successful aspects of their lives that they have not recognized before.

3. *Learn to monitor your self-talk.* Each of us thinks 50,000 thoughts per day, and many of them are about ourselves. We all need to learn to replace negative thoughts—I can't dance, I'm not smart, I don't like my face—with positive self-talk. I can learn to do anything I want, I am smart, I love and accept myself the way I am. I teach students to say, "Cancel, cancel," when they hear themselves or another person saying something negative about them and to replace the negative remark with a positive one. This technique takes time and practice, but it really makes a difference. Also, whenever others put them down, they are to repeat the following "antidote" sentence: "No matter what you say or do to me, I'm still a worthwhile person."

4. *Use support groups in the classroom.* It's possible for a kid to come to school for a whole day and never once be the center of positive attention. "Sharing dyads" and "support groups" help overcome this alienation. Each day teachers might ask their students to find a partner (preferably a different partner each day) and then give them one or two minutes each of uninterrupted time to talk about a specific topic; for example, *Who is your best friend and why? What is your favorite thing to do on the weekend? If you won a million dollar lottery, what would you do with the money?* Topics such as these can also be discussed in "buddy groups" of six kids with three sets of buddies. Sometimes youngsters meet with their buddies and sometimes with their whole group. They learn that it is a positive, healing experience to talk about their feelings, and they become bonded to their fellow students.

Resources for Increasing Students' Self-Esteem

The Alliance for Invitational Education, Room 216, Curry Building, University of North Carolina, Greensboro, NC 27412. The alliance publishes a comprehensive newsletter on self-esteem and invitational education and sponsors one national conference and several regional conferences yearly.

The California Task Force to Promote Self-Esteem and Personal and Social Responsibility, 1130 K St., Suite 300, Sacramento, CA 95814. This 25-member task force was appointed by the California governor and legislature to determine how to raise the self-esteem of at-risk groups in the state. Hawaii, Maryland, and Virginia have also created or begun to create similar task forces. For a copy of California's final report, *Toward a State of Esteem* (January 1990), send $4.50 to the Bureau of Publications, California State Department of Education, P.O. Box 271, Sacramento, CA 95802-0271. A 200-page *Appendix*, which includes an extensive bibliography on self-esteem and personal and social responsibility, is also available for $7.50.

The Center for Self-Esteem, P.O. Box 1532, Santa Cruz, CA 95060; (408) 426-6850. The center sponsors an annual conference; publishes a free newsletter; distributes curriculums, books, and tapes; and provides consultants and workshop leaders.

The Foundation for Self-Esteem, 6035 Bristol Pkwy., Culver City, CA 90230; (213) 568-1505. The foundation has published The GOALS Program, a three-and-a-half hour video training program being used in adult schools, correctional facilities, and with welfare recipients. It also sponsors an annual conference, provides consultants and workshop leaders, and distributes curriculums, books, and tapes.

The National Council for Self-Esteem, c/o Gail Dusa, President, 6641 Leyland Park Dr., San Jose, CA 95120. The council publishes a newsletter and a resource packet and sponsors a national conference and about 20 regional conferences yearly. Write for a free copy of the newsletter and an information packet. Annual dues, $25.

Self-Esteem Seminars, 6035 Bristol Pkwy., Culver City, CA 90230; (213) 337-9222. The organization conducts inservice training, offers an intensive Facilitators' Training Course, conducts weekend workshops for personal and professional growth, publishes a free quarterly newsletter, and offers a broad spectrum of books, tapes, and curriculum guides. Write for a free copy of their newsletter/catalogue.

5. *Identify your strengths and resources* An important part of expanded self-esteem is the broadened awareness of one's strengths and resources. One technique is to have students in their support groups write down and tell each other what they see as their positive qualities and strengths. Because their assessments need to be realistic as well as positive, it is also important to help students note those areas that need more development if they are to achieve their goals.

6. *Clarify your vision*. Without a clear vision, there is no motivation. Questions such as the following help students clarify their visions: *If you had only one year left to live, how would you spend your time? If a genie granted you three wishes, what would you wish for? If you were guaranteed success in anything you attempted, and money were not a limiting factor, what would you do when you grow up?* I also use extended guided visualizations in which students construct, for example, their "perfect life"—complete with their ideal house, job, and marriage partner—and share it with their support groups.

7. *Set goals and objectives*. Until our visions are broken down into specific and measurable goals—with timelines and deadlines—we are not likely to move forward very quickly. I teach students how to set measurable goals and objectives for self, family, school, and community. They then share their goals with the rest of the class, support one another as they work toward them, and celebrate any completed goals.

8. *Use visualization*. The most powerful yet underutilized tool in education is visualization. When we hold a clear vision of our goals as if they were already achieved, the action releases creativity, increases motivation, and actually alters our perceptions of ourselves and our environments. I ask students to spend five minutes per day visualizing each of their goals and objectives as if it were already achieved. This can produce radical results very quickly.

9. *Take action*. To be successful, you yourself have to "do the doing." I often cite the following example: you cannot hire someone else to do your push-ups for you and expect to develop your muscles. I constantly work with students to stretch into more and more action steps—doing things they previously did not think possible.

10. *Respond to feedback—and persevere*. I try to inspire students with stories of people like themselves who have gone on to do great things, often by working against the odds, for example, Wilma Rudolph, the great track star who was told as a youth that she would never walk again. I show them how to use mistakes for growth, to employ positive as well as negative feedback to their advantage, and to persevere until they accomplish their goals.

When teachers use these 10 steps in their classrooms, the improvements in students' self-esteem and achievement are rewarding. A comment from a teacher who participated in one of my workshops sums up the dramatic change that can occur in a child's life:

> I used to think all I needed to do was to teach mathematics well. Now I teach children, not math . . . The youngster who really made me understand this was Eddie. When I asked him one day why he thought he was doing so much better than last year, he replied, "It's because I like myself now when I'm with you."□

[1]For more information about raising the self-esteem of faculty in a school, contact the resources listed in the box on p. 49.

[2]The 10-step model is spelled out in greater detail and with many examples in *Self-Esteem in the Classroom: A Curriculum Guide*, which is available from the author at the address given below.

Jack Canfield is President of Self-Esteem Seminars, 6035 Bristol Pkwy., Culver City, CA 90230

Reading #4

Practical Intelligence for Success in School

Students can be taught to meet the implicit expectations of their teachers—they don't have to rely on osmosis.

Education . . . is a process of living and not a preparation for future living (Dewey 1964)

We knew the change had begun when we heard about "Carla" [all names of students in this paper are fictional]. During the first semester, Carla had been either late to the new Practical Intelligence class or not there at all. By the second week of the second semester, she had started to wander into class just before the bell rang. Although she hung back a little from the rest of the group, she was attentive and soon began to participate in her own way.

Carla had started the gradual process of dropping out (Bonikowske 1987) by 7th grade. Year after year, her performance suffered as she made the same mistakes, over and over again. Her teachers had not neglected her, but they were working under the assumption that she had learned what school expected of her; she had not. They saw their role as primarily one of teaching subject-matter in a variety of disciplines. They believed that she was either rebelling or not trying. But Carla had simply never learned what we call the *tacit knowledge* of school.

Unspoken Expectations

Teachers have a wide array of expectations for students, many of which are never explicitly verbalized. Students who cannot meet these implicit expectations may suffer through year after year of poor school performance without knowing quite what is wrong. Their teachers expect them to know how to allocate their time in doing homework, how to prepare course papers, how to study for tests, how to talk (and not to talk) to a teacher—if they never learn these things, they will suffer for it.

Students must learn how to use their intelligence effectively in school because that's where so much of their lives take place.

The concept of tacit knowledge was introduced by Polanyi (1946, 1976). Later, Sternberg (1985) and Wagner and Sternberg (1986) used it to describe knowledge that is not explicitly taught or even verbalized, but is necessary for an individual to thrive in an environment. The concept applies in a variety of settings. For example, level of tacit knowledge is an excellent predictor of performance in management (Wagner and Sternberg 1985, 1986). It is also crucial for successful performance in school. Indeed, our research indicates that it is as good a predictor of college success as are academic

types of tests (Sternberg and Wagner 1989). Of course we should teach students the skills they will need for life outside the school, but too often we forget the point of Dewey's quote at the beginning of this article—life in school is not just preparation for life: it *is* life. Students must learn how to use their intelligence effectively in school because that's where so much of their lives take place.

Our program—the Yale Practical-Intelligence-for-School (PIFS) curriculum—was developed to help students like Carla learn the vital tacit knowledge they need to succeed in school. This paper details the development of the PIFS curriculum, explains our teacher training procedures and lesson designs, and reports on our field-test and evaluation of the program at a middle school in a middle-class suburb of Connecticut.

Practical Intelligence

Since 1987, our Yale University team of investigators and Howard Gardner's Harvard University researchers have engaged in a joint effort to develop the theory-based curriculum, practical intelligence for school. The program is an outgrowth of a merger between two theories of human intelligence: Howard Gardner's (1983) theory of multiple intelligences and Robert J. Sternberg's (1985, 1988b) triarchic theory of human intelligence. The way we have combined the theories is illustrated in Figure 1. Gardner's theory expresses the domains in which intelligence manifests itself linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, interpersonal, and intrapersonal. Within Sternberg's triarchic theory, the componential subtheory identifies the mental processes that are exercised in these domains; the contextual subtheory defines the practical, "relevant-to-life" ways in which the processes are applied; and the experiential subtheory deals with the transfer of skills to new situations. Note that in Figure 1, under the contextual subtheory, the practical applications include both in-school and out-of-school problems.

Our Yale and Harvard research teams came up with a total Practical Intelligence curriculum which includes two parts:

- The Yale portion of the curriculum, designed to teach skills used across content areas. This is taught by content teachers separately for two to three periods per week, ideally for a period of a year.
- The Harvard portion of the curriculum, which emphasizes individual subject-matter infusion of skills within the content class.

The two teams work together. They generate ideas and provide feedback as the curriculum is developed. This report focuses on the Yale portion of the curriculum.

The Curriculum

The organization of the Yale Practical-Intelligence-for-School (PIFS) curriculum is based upon the three kinds of tacit knowledge that Wagner and Sternberg (1985) have found critical to adaptation to any environment: managing oneself, managing tasks, and working with (managing) others (see fig. 2). The curriculum consists of both a student text and a comprehensive teacher's manual that describes in

Fig. 1. Intellectual Operations

	Componential →	Contextual →	Experiential
Intellectual Domains (Multiple Intelligences)	*Examples of Mental Processes*	*Practical Application:*	*Transfer to New Situations:*
Linguistic	Selecting the steps needed to solve a problem.	How to organize your thoughts in order to write a book report.	Writing a history report. Writing a letter. Giving directions to someone.
Logical-Mathematical	Ordering the components of problem solving.	How to complete a math worksheet accurately.	Figuring out the steps for balancing a budget.
Musical	Selecting relevant information.	How to pick out the melody from the harmony.	Recognizing the main theme in a musical work.
Spatial	Selecting a mental representation for information.	How to make pictures in your mind to help you remember what you read.	Using a schematic to assemble a piece of electronic equipment. Reading a map.
Bodily-Kinesthetic	Allocating your resources.	How to pace yourself throughout a long-distance run.	Adjusting your physical exertion during a basketball game or ballet performance.
Interpersonal	Solution monitoring.	How to understand your teacher's comments on your history report.	Restating what someone is telling you to be sure you understand him or her.
Intrapersonal	Identifying a problem.	Figuring out that something bothers you in school.	Figuring out that you are getting annoyed by your brother's teasing.

Fig. 2. Practical Intelligence for School Curriculum

I. Managing Yourself

A. Overview of Managing Yourself
1. Introductory Lesson
2. Kinds of Intelligence: Definitions and Principles
3. Kinds of Intelligence: Multiple Intelligences
4. Kinds of Intelligence: Academic or Practical Intelligence
5. Understanding Test Scores
6. Exploring What You May Do
7. Accepting Responsibility
8. Collecting Your Thoughts and Setting Goals

B. Learning Styles
9. What's Your Learning Style?
10. Taking In New Information
11. Showing What You Learned
12. Knowing How You Work Best
13. Recognizing the Whole and the Parts

C. Improving Your Own Learning
14. Memory
15. Using What You Already Know
16. Making Pictures in Your Mind
17. Using Your Eyes—A Good Way to Learn
18. Recognizing the Point of View
19. Looking for the Best Way to Learn
20. Listening for Meaning
21. Learning by Doing

II. Managing Tasks

A. Overview of Solving Problems
22. Is There a Problem?
23. What Strategies Are You Using?
24. A Process to Help You Solve Problems
25. Planning a Way to Prevent Problems
26. Breaking Habits
27. Help with Our Problems

B. Specific School Problems
28. Taking Notes
29. Getting Organized
30. Understanding Questions
31. Following Directions
32. Underlining—Finding the Main Idea
33. Noticing the Way Things Are Written
34. Choosing Between Mapping and Outlining
35. Taking Tests
36. Seeing Likenesses and Differences in Subjects
37. Getting It Done on Time

III. Cooperating With Others

A. Communication
38. Class Discussions
39. What to Say
40. Tuning Your Conversation
41. Putting Yourself in Another's Place
42. Solving Problems in Communication

B. Fitting into School
43. Making Choices—Adapting, Shaping, Selecting
44. Understanding Social Networks
45. Seeing the Network: Different Roles
46. Seeing the Network: Figuring Out the Rules
47. Seeing the Relationship Between Now and Later
48. What Does School Mean to You?

detail how the course can be taught effectively.

The course opens with instruction on how students can manage themselves. The first units, on self-management, provide an overview of students' multiple intelligences. The teacher and the students discuss styles of thinking (see Sternberg 1988a, 1990) and how students can best exploit their own individual styles. This unit on self-management also deals with crucial aspects of adaptation to school, such as taking in new information, showing what you have learned, using what you know, and implementing what you have learned.

The second part of the course—managing tasks—deals with topics such as getting organized, setting up strategies for problem solving, breaking bad habits, seeking help with problems, and thinking about time management. This part of the course also deals with understanding questions, following directions, and taking tests.

The third part of the course—cooperating with others—presents such topics as how to handle yourself in class discussions, knowing what to say when, putting yourself in anothers' place, and solving communication problems. It also involves learning how to take a long-term perspective in dealing with other people.

Lesson Designs

The lesson designs in the teacher's guide follow a format based on the four-prong model of Sternberg and Davidson (1989). This model draws upon Vygotsky's (1978) idea that learning is most effective when it occurs first in a social context and is only internalized later.

The teacher is provided with lesson sections that describe the global purpose of the lesson and give the underlying theory or rationale for teaching it. The objectives and time planner help the teacher become quickly aware of the specific skills to be taught and the timing of the lesson. Information concerning prerequisite skills, an estimate of the amount of time needed for the lesson, and necessary materials facilitate preparation.

The teacher starts out by giving students an orientation to the concept being taught. First, the teacher taps the students' prior knowledge, which gives the teacher an opportunity to correct incorrect information and a chance to see the way students have learned to think about the topic. The teacher presents new information via lecture, discussion, questionnaires, and the text.

Students then meet in small groups to try to apply their new knowledge and skills. This part of the lesson includes games, activities, and work-

sheets as well as small group work. It allows for greater variety in the lessons, creating a sense that "something new may happen" in the Practical Intelligence class. Afterwards, students evaluate their use of the new knowledge or skill. They also critique their work and the material being taught.

Finally, the teacher provides integration activities that encourage the students to apply their new knowledge in their own lives. These activities are intended to help bring about the transfer of the new knowledge or skills to situations other than school.

Teachers and Teacher Training

Three teachers at our Connecticut field-test school received six after-school and one full-day inservice training sessions. Training focused on the two theories of intelligence, strategies for teaching, and problem solving. Teachers were supported during the implementation phase by weekly opportunities to interact with one or more of the coauthors. Five after-school meetings were conducted to develop plans and discuss concerns.

The Evaluation

Countless programs are introduced into schools either without evaluation or with evaluations limited to students' and teacher comments. We did not want our program to become one of these; rather, we wanted to know whether the program we devised would genuinely improve students' practical intelligence for schools. And because this was the first time the curriculum would be implemented, we were as concerned with using the results of our evaluation to improve the curriculum as we were with using them to test its validity and practicality.

One hundred 7th grade students participated in the study. We targeted the course to these students because grade 7 marks the point where school becomes much more complex: students need to learn how to shuttle between multiple classes and how to negotiate the demands of multiple teachers.

Three reading classes (a total of 61 students) were used as the experimental group, and two others served as a control (a total of 39 students). The experimental students received our course materials; the controls, the standard basal reader. Both groups were almost evenly distributed by gender. Because the program was administered over only one semester—three days per week for about 50 minutes per session—only about half the material was covered.

Three different tests were administered to the students before and after the course: *The Survey of Study Habits and Attitudes* (SSHA) (Brown and Holtzman 1967), *The Learning and Study Skills Inventory* (LASSI) (Weinstein and Palmer 1988), and the Practical Intelligence section of the *Sternberg Triarchic Abilities Test* (STAT). The STAT was included as a transfer test. None of the skills measured in the STAT were directly taught, but we hoped these practical-intellectual skills would improve as a result of the training.

On the SSHA, the experimental group showed statistically significant gains on all four scales (Delay Avoidance, Work Methods, Teacher Approval, and Education Acceptance). On the LASSI, experimental-group students showed statistically significant gains on nine of ten subscales: Attitude, Motivation, Information Processing, Selecting Main Ideas, Study Aids, and Self-Testing. Only the subscale Test Strategies did not show a significant gain. Results of the evaluation indicate 14 intergroup differences significantly favoring the experimental group, 1 significantly favoring the control group, and 2 favoring the experimental group nonsignificantly. These results suggest that the PIFS program was quite successful, even in one semester, in improving practical-intellectual skills as measured by two tests of study skills and one of practical intelligence.

Rather than merely hope that students have learned school survival skills in their previous grades, we can directly teach these skills to all students.

Tacit Knowledge Is Teachable

The usually unspoken knowledge that is crucial to practical intelligence for school is teachable. Rather than merely hope that students have learned school survival skills in their previous grades, we can directly teach these skills to all students.

But teaching practical intelligence for schools is anything but easy. For many teachers, successfully teaching it requires a fundamental reorientation of attitudes and teaching style. In particular, teachers need to come to value a kind of knowledge that they usually do not teach, despite expecting students somehow to learn it. And they must realize that this practical knowledge will be learned by students only if it is, well, *practical*. Students must see how to apply it in their daily school lives—we would not want students to acquire this knowledge in an isolated, encapsulated form that is not useful to them. We all want children to succeed in school; teaching practical intelligence for school can foster that success.

Finally, it's important to find out what the students thought of the class. After a lesson on memory, Bill said, "I'm bad at math. I always thought I would be bad at math even if I tried. I hate it so I just rush through it. Now I take my time with it. If I take my time to study it, I understand it better."

Nadia spoke up during a lesson on self-management. "This year I had trouble in social studies. I was too shy to ask the teacher. Then I got a *D*, so I asked the teacher for help when I

didn't understand. The next time I got an *A* in social studies."

Erin reported, "In social studies I changed the way I was studying. I went through every single chapter and tried to think of the main idea. I went from 60s to 80s in that class."

Jim said, "I didn't really think I could reach level 4 on the computer game. Now I'm top score. Now I believe I can improve by working hard."

The course also seemed to have a positive effect on students' attitudes toward others. One gifted student remarked, "Before, I thought that intelligence—practical and academic—was all one thing. I didn't realize it had different parts. It will help me recognize that someone might not be able to read but may be really smart in being able to repair a car. I used to think that other people were dumb. Now I think that they can be more intelligent than me in other categories. Before, I might have said to myself (not out loud, but in my head), 'You're so stupid.' Now I won't think of them as dumb anymore."

And Carla? She's still in school, in mind as well as in body, and doing just fine, thanks. □

References

Hamilton-Lee, D. (1987). *Truancy: A Prelude to Dropping Out*. Bloomington, Ind.: National Educational Service.

Brown, W. F., and W. H. Holtzman (1967). *Survey of Study Habits and Attitudes, Form H*. (SSHA) New York: The Psychological Corporation.

Dewey, J. (1964). "My Pedagogic Creed." In *John Dewey on Education: Selected Writings*, edited by R.D. Archambault. New York: Modern Library.

Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.

Polanyi, M. (1946). *Science, Faith and Society*. London: Oxford University Press.

Polanyi, M. (1976). "Tacit Knowledge." In *Theories in Contemporary Psychology*, edited by M. Marx and F. Goodson. New York: Macmillan.

Sternberg, R. J. (1985). *Beyond IQ: A Triarchic Theory of Human Intelligence*. New York: Cambridge University Press.

Sternberg, R. J. (1988a). "Mental Self-Government: A Theory of Intellectual Styles and their Development." *Human Development* 31: 197–224.

Sternberg, R. J. (1988b). *The Triarchic Mind*. New York: Viking.

Sternberg, R. J. (1990). "Thinking Styles: Keys to Understanding Student Performance." *Phi Delta Kappan* 71: 366–371.

Sternberg, R. J., and J. E. Davidson. (1989). "A Four-Prong Model for Intellectual Skills Development." *Journal of Research and Development in Education* 22: 22–28.

Sternberg, R. J., and R. K. Wagner. (1989). "Individual Differences in Practical Knowledge and its Acquisition." In *Individual Differences*, edited by P. Ackerman, R.J. Sternberg, and R. Glaser. New York: Freeman.

Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, Mass.: Harvard University Press.

Wagner, R. K., and R. J. Sternberg (1985). "Practical Intelligence in Real-World Pursuits: The Role of Tacit Knowledge." *Journal of Personality and Social Psychology* 49: 436–458.

Wagner, R. K., and R. J. Sternberg (1986). "Tacit Knowledge and Intelligence in the Everyday World." In *Practical Intelligence: Nature and Origins of Competence in the Everyday World*, edited by R. J. Sternberg and R. K. Wagner. New York: Cambridge University Press.

Weinstein, C. and D. Palmer. (1988). *Learning and Studies Skills Inventory*. Clearwater, Fla.: H & H Publishing Co.

Authors' note: Preparation of this article was supported by a grant from the McDonnell Foundation. We are grateful to Howard Gardner and his research group at Harvard for their collaboration in all phases of the PIFS Project. Alice S. Jackson was the primary liaison with the school in all aspects of this study. We thank Lenora Marcellis, Sandra Wright, and Elizabeth Neuse for their assistance in the preparation of this report. Requests for reprints or information about the Yale portion of the PIFS program should be sent to Robert J. Sternberg at the address, below.

Robert J. Sternberg is IBM Professor of Psychology and Education, **Lynn Okagaki** is Associate Research Scientist, and **Alice S. Jackson** is Associate in Research II, Yale University, Department of Psychology, P.O. Box 11A, Yale Station, New Haven, CT 06520-7447.

SP. # 03 7[illegible]26

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Applying Research About Instructional Strategies That Work With At-Risk Students

Author(s): Ky. Academy for School Executives, KASA (

Corporate Source: Designed for: Ky. Dept. of Education, Extended School Services (ESS)

Publication Date: March 1993

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

	The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2 documents	
☒ Check here **For Level 1 Release:** Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) *and* paper copy.	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY Sample TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY Sample TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	☐ Check here **For Level 2 Release:** Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but *not* in paper copy.
	Level 1	**Level 2**	

OTEC

JUL 09 1997

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Sign here→ please		
Signature: Carole G. Kruse	Printed Name/Position/Title: Carole G. Kruse, Program Mngr. ESS	
Organization/Address: 500 Mero Street 17th floor, CPT Frankfort, KY 40601	Telephone: 502-564-3678	FAX: 502-564-6952
	E-Mail Address: CKruse@kde.state.Ky.us	Date: 8/8/97

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

THE ERIC CLEARINGHOUSE ON TEACHING
AND TEACHER EDUCATION
ONE DUPONT CIRCLE, SUITE 610
WASHINGTON, DC 20036-1186
(202) 293-2450

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2d Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

(Rev. 6/96)